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ABSTRACT

Leaders in 446 communities throughout North Carolina answered questionnaires designed to determine the perceived need for trained personnel in their communities. The leaders described the availability of 33 professional/occupational categories as "serious shortage", "minor shortage", "sufficient", "oversupply", or "none needed/none available". The majority of leaders agreed on sufficient availability in 23 professional/occupational categories and shortages in 8 categories: physicians, dentists, nurses, veterinarians, home appliance repairmen, health technicians, plumbers, and qualified people for law enforcement positions. Analysis of degree of shortage and community size revealed that when shortages existed, they were especially critical in small communities; when professional/occupational categories were not in short supply, patterns of availability varied with occupational type and community size. Factor analysis using the Statistical Package for Social Sciences indicated that in North Carolina professionals in medical fields are most difficult to find and in shortest supply. The study clarifies the need for effective means of attracting professional and semi-professional personnel to non-urban communities throughout the state. (JH)

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PROFESSIONALS: THEIR AVAILABILITY IN NORTH CAROLINA COMMUNITIES

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FOREWORD

This report concerns the availability and shortages of professional and semi-professional individuals throughout North Carolina. In a state-wide survey of community leaders an attempt was made to ascertain which of the thirty-three preselected occupational categories lacked the needed personnel and which categories showed no problem with availability.

The survey covered 446 communities throughout the state while responses were received from 2,599 community leaders. An analysis of the responses indicates that a majority of the respondents perceived significant shortages of medical and other health related professional people. At the same time, the leaders reported shortages of professionals in service-oriented occupations.

The data reinforce other studies of recent note that have identified critical shortages of individuals trained to provide health services. Another pertinent conclusion drawn from the data is that rural communities, of which there are a great number throughout North Carolina, have more serious shortages than larger, urban communities.

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INTRODUCTION

More than a century ago, a French Sociologist, Frederic LePlay, searching for a formula for social peace concluded that "Everywhere happiness consists in the satisfaction of two principal needs imposed by the nature of man, daily bread (material things) and essential mores (the nonmaterial things)." Although the contemporary sociologist considers this conclusion as rather too abstract and philosophical, it does contain the germ of the modern sociological theory on how society is organized and how it operates. A contemporary, interpretive translation of LePlay's conclusion might read: The prosperity, viability and growth of a community depends on its ability to provide its inhabitants opportunities to make a living and to allow them to achieve their preferred life style.

Man, throughout history, has been on the move in search of places to make a living and has led his life according to his ability to provide for his needs and expectations. This is what founded this country. This is what has been shaping the demographic landscape of this nation. The great westward expansion of the United States, the migration from rural areas,[1] the movement of blacks from the south to the north,[2] and the recent movement of individuals from large metropolitan areas to suburban townships are some of the most consequential and discussed internal migration currents. "There are no indications that Americans will soon cease to be a nation of nomads."[3] Annually an estimated 36.9 percent of the population relocates.[4]

While the massive relocations of populations have been generally adjustive processes making possible tremendous growth and advancement in

the United States, the recent years have witnessed many counter-productive consequences of migration trends. For example, the rapid growth of population in urban areas seems to have gone hand in hand with an equally rapid increase in the magnitude and complexity of urban problems. Even before the current recession and high unemployment, it was becoming clear that for increasingly larger segments of the urban population, the dream of sufficiency, and living according to preferred life styles was no more than a nightmare. The nation responded to these problems by divergent human resource-development programs (education, health, welfare, vocational rehabilitation, manpower training and development, housing, etc.) funded largely from federal sources. The primary targets of these programs were metropolitan areas. Although there are, among experts, differences in opinion as to the degree of success (or failure) of these programs, it is generally agreed that the success was far from complete. As a result, search for new answers and new strategies has intensified again.

This search has yielded a significant spin-off -- increasing interest in rural problems among people who have previously concerned themselves primarily with urban areas. This spin-off has resulted from an increasing recognition that many of the problems of urban areas are a consequence of out-migration from rural areas. Indirectly, it has led to a belated recognition by political leadership that the out-migration from rural to urban areas that intensified many urban problems was equally detrimental to the quality of life in rural areas.

In a recent issue of the Raleigh News and Observer the front page headline read: "Lack of Industry Plaguing Small N.C. towns."[5] It reported, "The south side of this eastern North Carolina farming community was never really a glamour spot. Even before its pickle factory closed

down two years ago the southside's rows of rickety frame houses didn't look much different from those in the poor black section of any southern town. Mrs. Phillips, a store owner, said,'We got 200 people with nothing to do. If you ask me, that's why we have all this crime with the teenagers. They want money. We need some industries.' But town officials are worried that Ayden and its neighboring towns will turn into nothing but bedroom communities if the trend continues. The new plants like Eaton Corporation in Greenville and DuPont in Kinston have somewhat slowed the out-migration of disenchanted high school graduates to places like Philadelphia and New York." Other headlines have told the stories of unemployment, under employment, shortages of doctors, nurses, dentists and qualified persons in many other professional categories, especially in small rural communities.

What is the answer to these complex human problems? This question is being asked, and answers are being debated with ever-increasing frequency by local, state, and federal leaders, economists, social scientists, politicians, religious leaders, and citizens in general. In response to this, considerable attention has been directed at rural areas.[6] In recent years there has been a growing interest in developing plans and policies toward redistribution of population aimed at revitalizing the population growth in small rural commities.[7] "Under the general heading of rural development no fewer than 48 bills were introduced in the House of Representatives and 22 bills in the Senate during the first session of the 92nd Congress."[8] The most important piece of rural development legislation of the seventies is the Rural Development Act of 1972.[9] "The

Rural Development Act requires the Secretary of Agriculture to set goals for rural development and to report each year to the Congress on progress toward these goals. The goals for rural development are to be established in connection with employment, income, population, housing, and quality of community services and facilities."[10]

At the present time, there is plenty of skepticism about the clarity, feasibility and chances of success of many of the programs proposed and initiated by the Rural Development Act of 1973. Even if one were to assume that a general understanding of the act existed, it is doubtful that this will automatically result in improved community services. It is unrealistic to expect that small communities, as a result of the law, will automatically become viable and begin to grow and prosper. Going back to LePlay's notion discussed earlier, it may be argued that more jobs and improved community service do not necessarily provide a complete answer. The inhabitants of small rural communities, like people elsewhere, need many types of professional services so that they can lead their lives according to their preferred life styles. For example, the decline of general practitioners in the practice of family medicine made it necessary to rethink the concept of health delivery systems to all segments of the population. The increasing technological complexity of farm operations, including equipment requirements, household appliances, and other material things owned by a family has made it mandatory that professionally trained service individuals be available in the local areas. The list of trained people whose services are needed is long and is getting longer with the passage of time. However, little is known and less is understood about the process of encouraging professionals and other skilled individuals

to locate in rural areas. It is generally known that the lack of qualified personnel is more serious in small communities, especially those that have been losing population. Further, it is known that an increasing supply of professionals in a state or a region does not necessarily mean increased availability in small rural communities. Beyond this general understanding, not much specific knowledge is available.

This report is a part of wider research project aimed at finding ways and means to alleviate the problem of shortages of personnel needed to provide essential services in rural communities. This phase of the study is aimed at establishing an exhaustive list of essential professional and occupational categories, investigating the extent of availability of trained personnel in those categories in North Carolina communities, and understanding if and how these shortages are related to certain dimensions of the communities such as community size. The question of how the shortages can be alleviated by the communities will be dealt with in a subsequent report.

DATA COLLECTION

In a statewide survey aimed at establishing the nature and extent of shortages of professional personnel presented several methodological issues. These issues needed to be resolved before data collection could begin. A discussion of the issues and how they were resolved follows:

What Professional/Occupational Categories to Include?

The shortages in medical professional categories are well-known. Are there shortages in other professional/occupational categories? There are some speculations and some empirical hints about this question but nothing very definite is known. This being the case, it was decided to start with an exhaustive list. The list that was used as a point of departure came from a listing of professional, technical, and kindred workers prepared by the United States Department of Commerce, Bureau of Census. After a careful examination of the ninety-nine categories in this list, those considered relevant and appropriate to this study were selected. Some categories as "qualified people for law-enforcement" were added to the list. A list of thirty-three professional/occupational categories used in this study was thus finalized (see Appendix A).

How to Define Shortage?

Essentially, two alternative techniques to define shortage were available. One could collect data on the number of professionals in each category, divide them by population, develop a measure of professionals in categories x, y, and z for every 1,000 or 10,000 inhabitants, and then by some arbitrary means decide which communities had shortages and which did not. This was rejected both on practical and logical

grounds. Practically speaking, reliable data for some categories, and any data at all for some others, simply were not readily available and accessible. Logically, it would be equally difficult to put trust in an arbitrary measure that would, for example, say that x number of medical doctors per 1000 population is sufficient and that communities having less than this had a shortage. It was decided, therefore, to define shortages on the basis of community opinions. It was argued that reliable measures of shortages can be developed by questioning the leaders, who by virtue of their positions, are expected to deal with shortages of professionals.

Whose Opinions to Seek?

After considering the question of whose opinion to seek, it was decided not to go to a cross-section of the population, to the professionals themselves, or any organized group like the Junior Chamber of Commerce or the Extension Service. Rather, it was believed that prominent individuals, who were influential in the communities and who by their occupations or positions, were aware of the community problems, could provide a more realistic evaluation of local shortages. Therefore, elected local officials, heads of the local municipal departments, such as public works, recreation, police, welfare, etc., were selected for sampling. This group of indididuals will be referred to throughout the remainder of this report as 'leaders.'

After these issues were settled, a questionnaire was developed and tested. (See Appendix A). The questionnaire, in its final form, was one page long with an estimated time of completion to be fifteen minutes.

It included the thirty-three professional/occupational categories. During December 1974, 6,120 questionnaires were mailed to the leaders in 446 North Carolina communities. (See Appendix B). This included 170 members of the North Carolina General Assembly and 5,950 elected and other municipal leaders. At this point, an unanticipated problem was encountered. When the questionnaires were returned, the respondents had dealt with 516 communities, rather than 446. This situation occured because the respondent was requested to write in the community of his/her residence. Apparently, some respondents had referred to the communities (or subdividions) they lived in rather than the community to which the questionnaire had been mailed, and some others used the county as the unit of identification. This necessitated a re-examination of the analysis format that had been decided upon.

Accompanying the questionnaire was a letter of introduction explaining the purpose of the study. Leaders were requested to rate their communities in terms of the supply of professionals in the thirty-three categories. They were asked to describe the availability situation as "serious" or "minor shortage", "sufficient", "oversupply", or "not applicable" (none needed, none available). The questionnaire also included questions regarding the community size, leader's occupation, age, sex, whether or not they were holding an elected office, nativity, and a definition of the community (rural, rural-urban, urban). The leaders were also asked to indicate three categories they considered as having the most serious shortages and to indicate whether they thought state and/or federal aid would be needed to alleviate shortages in those categories.

Of the 6,120 questionnaires mailed, 2,599 were returned completed. An additional 83 were returned, but not completed. These were excluded from the survey. Some reasons for not completing the questionnaire were: deceased, no longer serving in the community, no forwarding address, or did not feel qualified to respond.

Several steps were taken in the preparation of the data for computer analysis. The major undertaking was the coding of the raw data. Size of the community was coded in the following way: (1) less than 500; (2) 500 to 999; (3) 1,000 to 1,499; (4) 1,500 to 2,499; (5) 2,500 to 4,999; (6) 5,000 to 9,999; (7) 10,000 to 14,999; (8) 15,000 to 24,999; (9) 25,000 to 49,999; (10) 50,000 and over; and (11) not reported. The occupations were coded in eight categories as follows: (1) Professional; (2) Public Service; (3) Managerial, clerical, and Sales; (4) Agri-Business; (5) Business; (6) Wage Earners; (7) Retired; and (8) Others. The Statistical Package of the Social Sciences (SPSS) program was selected for analysis of the data. The data analysis centered on cross-tabulations. The basic statistics used in this report are frequencies, percentage distributions, and modal responses of the leaders.

THE PROFESSIONALS: THEIR AVAILABILITY IN NORTH CAROLINA COMMUNITIES

This section is devoted to an analytical interpretation of the data concerning the extent of the availability of professionals in the thirty-three professional categories. The analysis is based on the data contained in the 2,599 completed questionnaires received from the leader-respondents.

The Leaders and Their Communities

Seeking information from a variety of leaders located in 446 communities provided an opportunity to deal with communities of all sizes ranging from a population of less than 500 to large metropolitan areas like Raleigh, Charlotte, Greensboro, and Winston-Salem with over 100,000 population. About half the communities (51.0%) included in the study have a population under 1,500, one-fifth (19.1%) have between 1,500 and 4,999 people, and about one-tenth (11.3%) have between 5,000 and 25,000 people. Only three percent had a population exceeding 25,000 people (Table 1). The distribution of the communities shows quite clearly that North Carolina has not yet lost its small-town character.

As an element of randomization, the distribution of the respondents shows that communities of all sizes were represented in the returns. For example, in the community sizes "less than 500" and "5,000 to 9,999" (Table 1) there were around 300 respondents each. For larger community sizes, as one would expect in terms of the small number of communities, the numbers of respondents were smaller too. Of the 2,599 completed questionnaires, only 70 respondents named communities other than the 446 incorporated towns.

TABLE 1. Distribution of leader-respondents and communities by community population category, Survey of Professionals' Availability, North Carolina, 1975.

Population	Communities		Leader-Respondents	
	No.	%	No.	%
Incorporated Towns*	(446)	(86.4)	(2456)	(94.5)
Less than 500	112	21.7	320	12.3
500 - 999	101	19.6	349	13.5
1,000 - 1,499	56	10.9	297	11.4
1,500 - 2,499	52	10.1	326	12.5
2,500 - 4,999	49	9.5	311	12.0
5,000 - 9,999	36	7.0	285	11.0
10,000 - 14,999	11	2.1	102	3.9
15,000 - 24,999	13	2.5	150	5.8
25,000 - 49,999	8	1.5	120	4.6
50,000 +	8	1.5	196	7.5
Unincorporated Communities (population unknown)	(20)	(3.9)	(23)	(0.9)
Communities Identified by County Names (population unknown)	(50)	(9.7)	(120)	(4.6)
Total	516	100.0	2599	100.0

* Towns listed in the 1973-74 Directory of North Carolina Municipal Officials, North Carolina League of Municipalities, February 1974.

In the analysis of data by community size it was initially planned that the 1973-74 population figures reported for the 446 communities by the North Carolina League of Municipalities would be used. However, as discussed earlier, responses from 516 communities were received and there was no reasonable and reliable way to establish the exact population figures for the 70 extra communities. Fortunately, the respondents were asked to indicate the population of their communities. A careful examination of this showed that in almost all cases the actual and reported populations fell in the same category; hence, the analysis by community size is based on population figures as reported by the leaders themselves.

When comparing community size to the respondents' definition of the community in terms of rural, rural-urban, or urban, an interesting picture emerges. For example, the leaders of very small communities (less than 500) did not necessarily designate their communities as rural, nor did the leaders of large cities (50,000+) unanimously agree that their communities were urban (Table 2). However, as the community size increases, the proportions designating their communities as rural decline and, generally speaking, the proportions designating their communities rural-urban or urban increase. Majorities in size categories less than 500 and 500 to 999 labeled their communities as rural; majorities in size categories 2,500 to 4,999 and 5,000 to 9,999 considered their communities to be rural-urban, and a majority in size category 50,000+ thought their communities to be urban.

The leader-respondents were primarily male (87.4%). A majority (51.1%) were between 45 and 65 years of age, about one-twelfth (8.1%)

TABLE 2. Distribution of the leaders by their definition of the type of community they lived in and by community population category, Survey of Professionals' Availability, North Carolina, 1975

Population	TYPES OF COMMUNITY					
	Rural	Rural-Urban	Urban	No Response	Total %	Total N
Less than 500	64.9	26.1	5.7	3.3	100.0	245
500 - 999	50.9	36.7	9.9	2.5	100.0	332
1,000 - 1,499	45.9	43.2	8.1	2.8	100.0	222
1,500 - 2,499	37.4	44.5	14.9	3.2	100.0	281
2,500 - 4,999	22.9	53.4	19.8	3.9	100.0	406
5,000 - 9,999	18.2	52.4	24.5	4.9	100.0	307
10,000 - 14,999	8.6	48.6	40.0	2.8	100.0	105
15,000 - 24,999	5.4	41.1	49.5	4.0	100.0	202
25,000 - 49,999	7.7	52.9	38.1	1.3	100.0	155
50,000 +	1.6	18.2	79.1	1.1	100.0	258
Population not reported	37.3	33.7	13.3	15.7	100.0	86
Total	28.9	41.4	26.1	3.6	100.0	2599

were over 65 years, and the remainder were less than 45 years of age (Table 3). The leaders were about evenly divided between those who were holding elected office (1197) and those who were not (1337). From an occupational standpoint, the elected leaders were predominantly engaged in public service activities; however majorities in other occupational categories also indicated that they were holding elected office (Table 4).

The occupational distribution in the various size communities showed interesting variations (Table 5). Generally speaking, the larger the population, the larger were the proportions of leaders whose occupations were classified as professionals and public service. For example, 10.2 percent of the leaders of less than 500 population communities were professional; the percentage for 50,000 or more was 27.5 percent. As is obvious, the larger the community population the smaller was the percentage of leaders who were in agriculture-business, business, wage-earners and retired categories.

Most (68.7%) of the leaders considered themselves natives of the community they were residing in at the time of the survey. The proportions considering themselves native were generally higher for smaller communities (Table 6). Also as Table 7 shows, the proportions considering themselves as native were higher for rural (85.1%) and rural-urban (85.7%) communities than for urban communities (71.1%).

Majority Reports Shortages in Eight Categories

As indicated earlier, the leaders were asked to check one of the five responses indicating their perceptions of the availability of

TABLE 3. Age distribution of leader-respondents, Survey of Professionals' Availability, North Carolina, 1975.

Age	Number	Percent
Under 25	45	1.7
25 - 44	929	35.7
45 - 64	1327	51.1
65 +	211	8.1
Not reported	87	3.4
Total	2599	100.0

TABLE 4. Distribution of leader-respondents by their occupation and elected office, Survey of Professionals' Availability, North Carolina, 1975.

Occupation	ELECTED OFFICE				
	Yes	No	No Response	Total %	Total N
Professional	42.5	56.4	1.2	100.0	433
Public Service	21.3	75.7	3.0	100.0	925
Managerial & Clerical	59.2	40.1	0.7	100.0	539
Agri-Business	93.2	6.8	0.0	100.0	44
Business	82.2	17.8	0.0	100.0	197
Wage Earners	65.9	31.9	2.2	100.0	135
Retired	68.4	28.5	3.2	100.0	158
Others	58.7	30.9	10.3	100.0	168
Total	46.1	51.4	2.5	100.0	2599

TABLE 5. Distribution of leader-respondents by community population category and occupation, Survey of Professionals Availability, North Carolina, 1975

Community Size	OCCUPATION									
	Prof	Public Service	Manager Clerical	Agri-Business	Business	Wage Earners	Retired	Others	Total %	Total N
Less Than 500	10.2	20.8	20.4	5.3	8.2	13.1	9.8	12.2	100.0	245
500-999	8.7	28.6	22.9	3.9	12.0	8.7	11.1	3.9	100.0	332
1,000-1,499	12.6	30.6	25.2	0.9	9.9	6.3	8.1	6.4	100.0	222
1,500-2,499	14.2	34.9	21.7	1.1	9.6	5.7	6.0	6.8	100.0	281
2,500-4,999	15.0	38.7	20.0	1.5	7.4	4.9	6.2	6.4	100.0	406
5,000-9,999	20.5	39.7	20.5	1.3	8.8	2.0	4.6	2.6	100.0	307
10,000-14,999	19.0	48.6	16.2	0.0	6.7	1.0	4.8	3.8	100.0	105
15,000-24,999	21.3	43.6	21.3	0.0	2.5	3.0	3.0	5.5	100.0	202
25,000-49,999	25.8	43.9	19.4	0.0	1.9	2.6	1.3	5.2	100.0	155
50,000 +	27.5	42.2	19.3	0.4	3.9	0.8	1.2	4.7	100.0	258
Population not reported	15.7	21.7	14.5	2.4	7.2	6.0	8.4	24.1	100.0	86
Total	16.7	35.5	20.7	1.7	7.6	5.2	6.1	6.5	100.0	2599

TABLE 6. Distribution of leader-respondents by community population category and North Carolina nativity, Survey of Professionals' Availability, North Carolina, 1975.

Community Size	NATIVE				
	Yes	No	No Response	Total %	Total N
Less than 500	86.5	10.2	3.3	100.0	245
500-999	83.7	12.7	3.6	100.0	332
1,000-1,499	86.9	9.9	3.2	100.0	222
1,500-2,499	88.6	7.8	3.5	100.0	281
2,500-4,999	89.4	8.6	2.0	100.0	406
5,000-9,999	85.7	11.4	2.9	100.0	307
10,000-14,999	81.0	19.0	0.0	100.0	105
15,000-24,999	77.2	18.8	4.0	100.0	202
25,000-49,999	79.4	17.4	3.2	100.0	155
50,000+	70.9	26.7	2.3	100.0	258
Population Unknown	68.7	14.5	16.9	100.0	86
Total	83.2	13.3	3.5	100.0	2599

TABLE 7. Distribution of leader-respondents by type of community of residence and by North Carolina nativity, Survey of Professionals' Availability, North Carolina 1975.

Community type	NATIVE				
	Yes	No	No Response	Total %	Total N
Rural	85.1	12.0	2.9	100.0	751
Rural-Urban	85.7	11.2	3.2	100.0	1076
Urban	79.2	19.5	1.3	100.0	678
Type Unknown	71.1	5.6	23.3	100.0	94
Total	83.2	13.3	3.5	100.0	2599

people in the thirty-three professional categories. When the proportions indicating serious shortage and minor shortage are combined to get an overall picture of percieved shortages, the data (Table 8 and Figure 1) indicate that at least a majority of the leaders reported shortages in eight categories. These categories are: physicians (80.4%), dentists (62.9%), nurses (63.4%), qualified people for law enforcement positions (57.1%), veterinarians (52.0%), home appliance reparimen (59.7%), health technicians (54.7%), and plumbers (51.2%). For an equal number of categories very small proportions (less than 20%) indicated shortages in their communities. These are: junior and senior high school teachers (18.2%), elementary school teachers (18.1%), lawyers (18.0%), foresters (17.7%), newspaper reporters (15.3%), embalmers (13.8%), librarians (13.5%), radio and television announcers (11.5%) and clergymen (11.3%).

Majority Reports No Shortages in Twenty-three Categories

Judging once again by a majority of respondents, there does not seem to be any problems with the supply of professionals in twenty-three categories. For example, while 73.4 percent of the leaders believed they had a sufficient number of clergymen in their communities, there were in addition 5.9 percent who believed they were in over-supply and 1.6 percent claiming that they did not have any clergymen nor did they need any. Thus 80.9 percent (73.4 + 5.9 + 1.6) of the leaders responded that there was no problem as far as the supply of clergymen is concerned. Comparable proportions for other categories are: radio and television announcers 80.6 percent, librarians 77.9 percent, embalmers 77.0 percent, newspaper reporters 76.2 percent,

TABLE 8. Distribution of leader-respondents according to their perception of the availability of professionals in the thirty-three professional categories. Survey of Professionals' Availability, North Carolina, 1975.

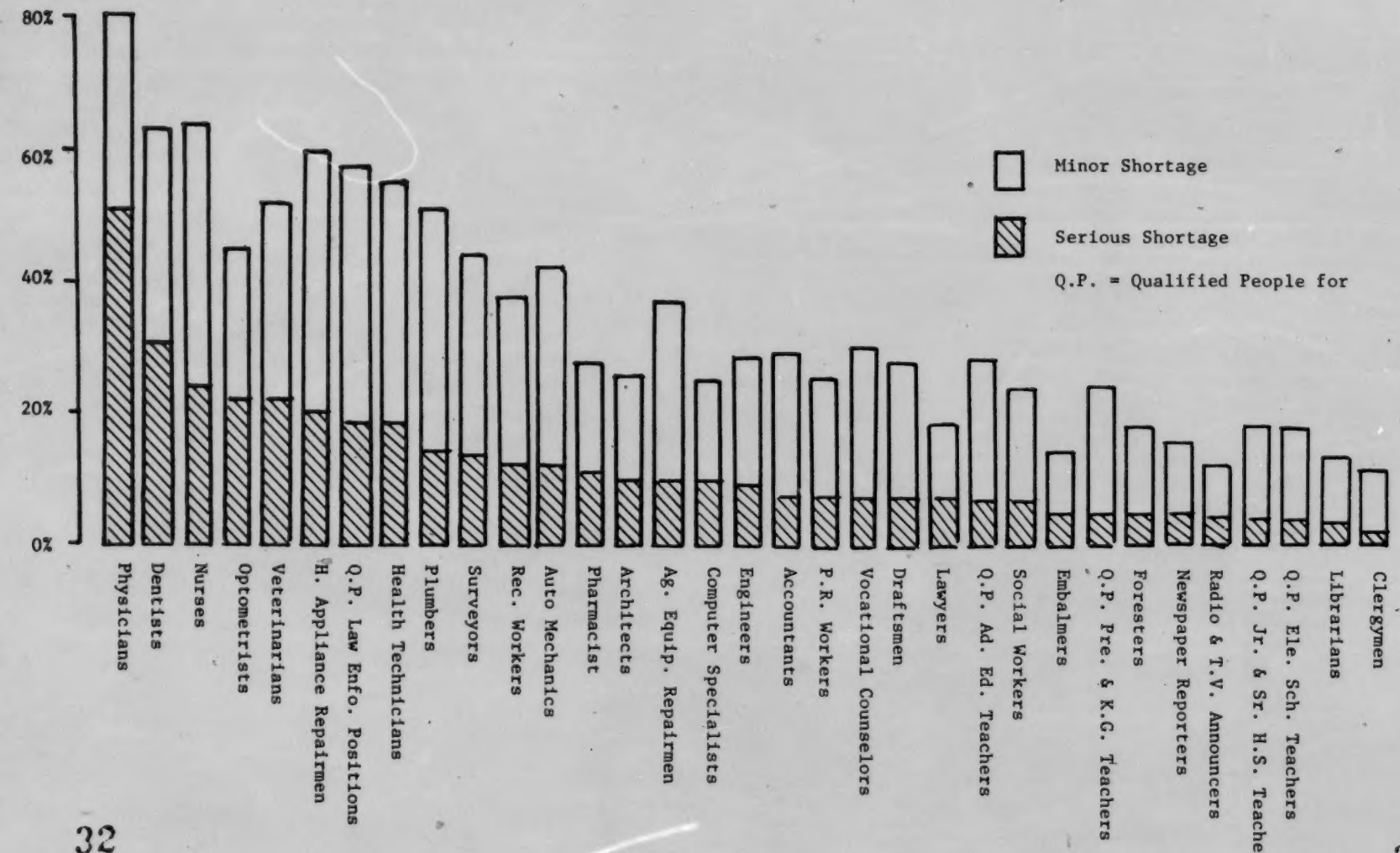
Occupational Categories	Serious Shortage %	Rank	Minor Shrtge. %	Shortage (1+2) %	Rank	Suffcnt. %
Physicians	51.2	1	29.2	(80.4)	1	14.5
Dentists	31.3	2	31.6	(62.9)	3	29.5
Nurses	24.4	3	39.1	(63.4)	2	25.0
Optometrists	22.0	4	23.4	(45.4)	9	40.8
Veterinarians	21.6	5	29.4	(52.0)	7	35.4
Home Applnc. Rprmn.	19.6	6	40.1	(59.7)	4	32.4
QP Law Enfrcmnt.	18.0	7	39.1	(57.1)	5	36.7
Health Technicians	17.9	8	36.8	(54.7)	6	26.9
Plumbers	14.4	9	36.8	(51.2)	8	42.2
Surveyors	13.4	10	30.3	(43.7)	10	41.3
Recreational Wrkers.	12.2	11	25.0	(37.2)	12	44.1
Auto Mechanics	11.8	12	30.0	(41.8)	11	48.1
Pharmacists	10.6	13	17.0	(27.6)	19	61.4
Architects	9.8	14	16.0	(25.8)	20	40.9
Ag. Eqpmnt. Rprmn.	9.7	15	27.2	(36.9)	13	43.1
Computer Specialists	9.5	16	15.5	(25.0)	22	27.8
Engineers	9.0	17	19.2	(28.2)	17	39.8
Accountants	7.5	18	21.6	(29.1)	15	57.3
P.R. Workers	7.5	19	17.9	(25.4)	21	45.8
Vocational Cnslrs.	7.3	20	22.0	(30.2)	14	48.2
Draftsmen	6.8	21	21.5	(28.3)	16	39.9
Lawyers	6.7	22	11.3	(18.0)	27	53.6
QP Adult Ed. Tchrs.	6.4	23	21.5	(27.9)	18	52.5
Social Workers	6.2	24	17.6	(23.8)	24	52.1
Embalmers	5.1	25	8.7	(13.8)	30	66.7
QP Pre-KG & KG Tchrs.	4.8	26	19.2	(24.0)	23	57.7
Foresters	4.5	27	13.2	(17.7)	28	49.7
Newspaper Rprtrs.	4.5	28	10.8	(15.3)	29	58.6
Radio & TV Anncrs.	4.1	29	7.4	(11.5)	32	53.4
QP Jr&Sr H.S. Tchrs.	3.8	30	14.4	(18.2)	25	60.6
Elmntry. Sch. Tchrs.	3.7	31	14.4	(18.1)	26	61.6
Librarians	3.3	32	10.2	(13.5)	31	67.3
Clergymen	2.0	33	9.3	(11.3)	33	73.4

QP = Qualified People For

TABLE 8. Continued.

Oversppl. %	Not Applicable %	Rank	Not Ascrtnbl. %
0.6	1.3	29	3.2
0.7	2.2	27	4.7
0.5	4.0	21	7.0
0.8	5.7	18	7.3
0.4	5.8	17	7.4
0.9	1.3	29	5.7
0.7	0.7	33	4.8
0.3	8.1	13	9.9
0.8	0.9	31	4.9
1.2	6.7	14	7.1
4.5	4.5	20	9.7
2.7	0.9	31	6.5
1.3	3.1	24	6.6
2.6	21.7	3	9.0
0.5	8.2	12	11.3
1.3	33.6	1	12.3
2.0	20.9	4	9.1
1.1	5.2	19	7.3
4.0	14.7	7	10.1
1.9	8.5	11	11.2
1.7	19.7	5	10.4
15.6	6.2	16	6.6
4.7	3.2	23	11.7
9.6	6.4	15	8.1
1.4	8.9	10	9.2
6.0	2.5	25	9.8
1.0	18.6	6	13.0
5.3	12.3	8	8.5
2.8	22.4	2	9.9
8.0	3.3	22	9.9
8.4	2.3	26	9.6
1.4	9.2	9	8.6
5.9	1.6	28	7.8

FIGURE 1. Percentages of leaders citing serious and minor shortages, Survey of Professionals' Availability, North Carolina, 1975.



lawyers 75.4 percent, elementary school teachers 72.3 percent, junior and senior high school teachers 71.9 percent, foresters 69.3 percent, social workers 68.1 percent, pre-kindergarten and kindergarten teachers 66.2 percent, pharmacists 65.8 percent, architects 65.2 percent, public relations workers 64.5 percent, accountants 63.6 percent, engineers 62.7 percent, computer specialists 62.7 percent, draftsmen 61.3 percent, vocational counselors 58.6 percent, recreational workers 53.1 percent, adult education teachers 52.2 percent, agricultural equipment repairmen 51.8 percent, and auto mechanics 51.7 percent.

In conclusion, a majority of leaders reported shortages in eight professional categories, no shortages in twenty-three categories and in two categories (surveyors and optometrists) there was no clear-cut perception reported.

The Nature and Extent of Perceived Shortages: A Function of Community Size?

This section is aimed primarily at elaborating on the interrelationship between perceived shortages and the functional needs of the community. There is reason to believe that communities of different sizes have different needs and have unequal abilities to attract professionals, and may, therefore, have different perceptions of how their communities fare so far as the availabilities of professionals are concerned. An examination of how the perceived availabilities and shortages of professionals in the thirty-three professional categories are related to community size is presented.

Availability of Physicians and Community Size:

The data here validate empirically what is generally suspected. While there is a statewide shortage of physicians, the shortages seem especially critical in smaller communities. As shown in Table 9 and Figure 2, the smaller the community size, the larger the proportion of leaders reporting a serious shortage of physicians. While 65.4 percent of the leaders of communities with less than 500 people reported a serious shortage, the comparable proportion for communities with over 50,000 people was 29.5 percent. This, however, should not be interpreted as indicating a sufficient supply of physicians in larger communities. Rather, minor shortages seem to be a more prevalent opinion in larger communities (Table 10 and Figure 2). The communities with more than 5,000 people reported a minor shortage more often (5,000 to 9,999 - 35.0%, 10,000 to 14,999 - 36.2%, 15,000 to 24,999 - 43.5%, 25,000 to 49,999 - 32.9%, and over 50,000 - 41.8%) than small communities (less than 500 - 16.7%, 500 to 999 - 21.7%, 1,000 to 1,499 - 26.6%, 1,500 to 2,499 - 25.6%, and 2,500 to 4,999 - 23.2%). Combining the proportions reporting a serious and/or a minor shortage gives an overall picture (Table 11) that shortages of physicians is generally seen as a problem in communities of all sizes, while it seems to be a more serious problem in communities with less than 10,000 people.

Surprisingly, there were some leaders who responded that their community did not have any physicians and did not need any. Since the number of leaders who responded in this way was so small and most of these people lived in communities of less than 500 population, this statistic should not be overemphasized. It is entirely possible that

TABLE 9. Percentages of leaders indicating serious shortage in the thirty three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975

Occupational Categories	Community Population: Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	65.4	1	63.3	1	58.1	1	53.8	1	60.8	1
Dentists	49.0	2	48.2	2	41.4	2	39.4	2	32.3	2
Nurses	25.7	6	27.7	5	19.4	7	27.4	4	24.1	4
Optometrists	36.3	3	37.1	3	32.0	3	26.0	5	22.2	5
Veterinarians	27.8	5	30.5	4	26.1	4	29.2	3	26.1	3
Home Applnc. Rprmn.	22.0	10	23.2	8	26.1	4	24.9	6	20.0	6
OP Law Enfremnt.	32.4	4	24.7	6	20.3	6	12.8	12	15.5	9
Health Technicians	24.0	9	19.9	9	18.9	8	19.9	7	17.5	8
Plumbers	20.4	11	19.3	10	16.2	10	16.7	9	19.2	7
Surveyors	17.1	13	15.4	12	16.2	10	17.4	8	13.8	10
Recreational Wrkers.	24.5	8	18.1	11	18.9	8	13.2	11	13.3	11
Auto Mechanics	12.2	22	11.4	17	13.1	13	15.7	10	12.8	12
Pharmacists	25.3	7	24.4	7	15.8	12	8.2	20	4.9	25
Architects	13.9	19	11.4	17	10.8	15	10.7	15	10.6	13
Ag. Eqpmnt. Rprmn.	16.7	14	12.7	13	12.2	14	12.8	12	9.6	14
Computer Speclsts.	13.9	19	8.7	23	8.6	20	7.1	22	8.6	16
Engineers	14.7	16	9.6	21	10.4	16	11.4	14	9.1	15
Accountants	14.7	16	12.3	14	8.6	20	10.3	16	7.4	19
P.R. Workers	14.3	18	10.2	19	9.0	18	10.0	17	7.6	18
Vocational Cnslrs.	18.0	12	11.7	16	5.9	23	6.8	23	8.1	17
Draftsmen	11.8	24	9.3	22	5.9	23	8.9	19	6.9	21
Lawyers	15.1	15	12.3	14	9.9	17	9.3	18	6.7	23
QP Adult Ed. Tchrs.	10.6	27	6.3	26	4.5	27	7.8	21	7.1	20
Social Workers	11.8	24	7.2	24	8.6	20	5.3	25	6.9	21
Embalmers	13.5	21	9.9	20	5.4	25	3.6	32	4.4	29
QP Pre-KG & Tchrs.	8.6	29	5.7	29	2.3	31	5.3	25	5.4	24
Foresters	9.4	28	6.0	27	4.1	28	5.3	25	3.4	31
Newspaper Rprtrs.	11.0	26	7.2	24	6.3	22	5.3	25	4.9	25
Radio & TV Anncrs.	11.8	24	6.0	27	5.0	26	4.3	30	4.7	27
QP Jr. & Sr. H.S. Tchrs.	7.8	31	4.2	31	2.7	29	4.3	30	4.2	30
QP Elmntry. Sch. Tchrs.	6.9	32	2.4	32	1.8	32	5.0	28	4.7	27
Librarians	8.6	29	5.1	30	2.7	29	4.6	29	2.7	32
Clergymen	6.5	33	1.8	33	1.8	32	1.8	33	2.2	33

QP = Qualified People For

TABLE 9. Continued:

Occupational Categories	Community Population									
	5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 and over	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	49.9	1	41.8	1	31.2	1	35.6	1	29.5	1
Dentists	21.2	3	23.8	2	15.8	6	11.6	4	14.0	5
Nurses	21.8	2	20.0	3	24.8	2	23.9	2	25.6	2
Optometrists	18.6	6	10.5	7	5.9	15	7.7	9	8.1	8
Veterinarians	18.9	5	14.3	6	13.4	7	6.5	12	9.3	7
Home Applnc. Rprmn.	19.2	4	18.1	4	17.3	4	10.3	5	10.9	6
QP Law Enfremnt.	13.4	12	8.6	11	13.4	7	10.3	5	23.3	3
Health Technicians	14.7	10	17.1	5	17.3	4	12.3	3	16.7	4
Plumbers	14.3	11	5.7	15	7.9	3	5.8	14	2.7	21
Surveyors	15.6	7	9.5	9	12.9	9	6.5	12	3.9	15
Recreational Wrkers.	7.5	17	3.8	18	3.0	23	7.1	10	4.3	14
Auto Mechanics	13.0	13	9.5	9	8.4	11	9.0	7	7.4	9
Pharmacists	6.8	19	7.6	13	0.5	32	2.6	23	5.8	11
Arctitects	15.0	8	10.5	7	6.9	12	3.2	20	1.2	28
Ag. Eqpmnt. Rprmn.	9.1	15	4.8	16	6.9	12	3.2	20	2.3	23
Computer Spclsts.	15.0	8	7.6	13	8.9	10	9.0	7	5.8	11
Engineers	11.1	14	8.6	11	6.4	14	3.2	20	3.1	19
Accountants	4.9	23	2.9	22	4.5	18	0.6	30	3.1	19
P.R. Workers	5.5	21	2.9	22	5.0	16	3.9	16	2.7	21
Vocational Cnslrs.	4.9	23	3.8	18	4.5	18	2.6	23	2.3	23
Draftsmen	9.1	15	1.9	25	3.5	20	2.6	23	1.9	25
Lawyers	2.9	28	1.0	29	1.0	29	1.9	27	0.4	31
QP Adult Ed. Tchrs.	7.2	18	3.8	18	4.5	18	2.6	23	7.0	10
Social Workers	5.9	20	1.9	25	3.0	23	3.9	16	3.1	19
Embalmers	4.2	25	1.0	29	3.0	23	1.3	29	0.0	33
QP Pre-KG & KG Tchrs.	2.9	28	2.9	22	3.0	23	6.5	12	4.7	13
Foresters	5.5	21	2.9	22	3.0	23	1.9	27	1.6	26
Newspaper Rprtrs.	2.0	32	2.9	22	0.5	32	0.6	30	1.6	26
Radio & TV Anncrs.	2.6	31	1.0	29	1.0	29	0.0	32	0.4	31
QP Jr. & Sr. H.S. Tchrs.	2.9	28	1.0	29	1.0	29	3.9	16	3.9	15
QP Elmntry. Sch. Tchrs.	3.6	26	1.0	29	1.5	26	3.9	16	3.5	17
Librarians	2.9	28	0.0	33	1.5	26	1.9	27	0.8	30
Clergymen	1.0	33	1.0	29	0.5	32	0.0	32	1.2	28

QP = Qualified People For

TABLE 10. Percentages of leaders indicating minor shortage in the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community Population									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	16.7	16	21.7	14	26.6	11	25.6	11	23.2	14
Dentists	20.0	10	23.2	11	27.0	9	29.2	9	36.1	6
Nurses	28.6	3	33.2	5	40.0	1	30.3	7	39.1	4
Optometrists	15.5	18	22.0	13	23.4	14	22.8	14	27.1	11
Veterinarians	20.0	10	28.6	8	29.8	5	29.5	8	27.3	10
Home Applnc. Rprmn.	33.1	2	42.8	1	37.8	3	37.7	3	40.9	2
QP Law Enfrcmnt.	26.1	5	36.8	3	36.0	4	40.6	1	39.9	3
Health Technicians	25.4	7	35.5	4	27.0	9	29.1	10	36.5	5
Plumbers	43.2	1	41.6	2	38.7	2	40.2	2	41.2	1
Surveyors	20.0	10	25.0	9	28.8	7	31.0	5	30.0	7
Recreational Wrkers.	19.6	12	24.7	10	29.3	6	32.0	4	30.0	7
Auto Mechanics	25.7	6	29.8	6	26.6	11	24.9	12	25.9	12
Pharmacists	11.0	23	16.3	18	18.0	17	18.9	18	16.7	22
Architects	8.2	28	13.3	26	14.0	23	16.0	21	20.9	20
Ag. Eqpmnt. Rprmn.	26.9	4	29.5	7	28.4	8	30.6	6	29.3	9
Computer Spclsts.	4.1	33	9.3	29	5.9	32	8.9	32	14.3	24
Engineers	6.5	29	16.0	19	14.4	22	13.2	24	21.7	16
Accountants	17.6	15	22.9	12	23.9	13	22.8	14	24.6	13
P.R. Workers	13.9	20	15.1	20	15.3	20	17.8	20	21.2	19
Vocational Cnslrs.	14.7	19	16.6	17	21.2	16	20.6	16	21.4	18
Draftsmen	11.0	23	15.1	20	14.0	23	19.2	17	22.4	15
Lawyers	10.6	25	13.6	24	16.7	19	18.9	18	13.5	26
QP Adult Ed. Tchrs.	20.4	8	18.7	15	23.0	15	16.0	21	21.7	16
Social Workers	12.2	21	14.5	22	9.9	27	23.5	13	15.8	23
Embalmers	4.9	32	8.7	30	7.7	30	12.1	25	10.6	30
QP Pre-KG & KG Tchrs.	19.2	13	18.4	16	17.1	18	14.9	12	18.0	21
Foresters	9.4	26	13.0	27	11.7	26	12.1	25	12.6	28
Newspaper Rprtrs.	8.6	27	9.9	28	9.5	28	11.7	27	10.3	31
Radio & TV Anncrs.	6.5	29	5.7	33	5.4	33	6.8	33	8.9	32
QP Jr. & Sr. H.S. Tchrs.	18.4	14	13.6	24	13.5	25	10.7	29	14.0	25
QP Elmntry. Sch. Tchrs.	16.7	16	13.6	24	14.9	21	10.0	31	12.8	27
Librarians	5.3	31	8.4	31	9.0	29	10.7	29	12.1	29
Clergymen	11.0	23	7.5	32	7.2	31	10.7	29	8.6	33

QP = Qualified People For

TABLE 10. Continued

Occupational Categories	Community Population									
	5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 49,999		50,000 and over	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	35.8	6	36.2	9	43.5	2	32.9	9	41.8	3
Dentists	34.9	8	40.9	4	39.1	7	34.2	8	36.8	6
Nurses	45.2	2	46.7	1	47.9	1	41.9	4	48.4	1
Optometrists	26.7	14	25.7	15	22.8	18	20.8	21	24.0	12
Veterinarians	29.6	12	40.0	5	36.6	8	38.1	6	27.5	10
Home Applnc. Rprmn.	44.4	4	39.1	7	43.5	2	41.3	5	38.0	4
QP Law Enfrcmnt.	46.8	1	41.9	3	41.1	5	49.0	1	35.7	7
Health Technicians	44.6	3	40.0	5	43.1	4	47.1	2	45.7	2
Plumbers	40.1	5	36.2	9	28.2	14	29.7	12	31.4	8
Surveyors	35.2	7	42.8	2	41.1	5	45.2	3	21.7	15
Recreational Wrkers.	28.0	13	19.0	20	21.3	20	21.9	19	17.1	19
Auto Mechanics	32.6	9	36.2	9	34.7	10	34.8	7	38.0	4
Pharmacists	16.3	25	16.2	24	19.3	21	18.7	23	20.5	16
Architects	21.8	20	27.6	13	19.3	21	19.4	22	6.6	30
Ag. Eqpmnt. Rprmn.	29.6	11	23.8	18	27.2	15	31.0	11	14.7	22
Computer Spclsts.	14.7	26	26.7	14	13.7	28	28.4	14	26.7	11
Engineers	25.7	16	30.5	11	32.7	11	28.4	14	15.5	21
Accountants	25.1	18	24.8	16	17.8	24	15.5	24	16.7	20
P.R. Workers	20.5	21	15.2	25	22.8	18	25.2	16	12.0	25
Vocational Cnslrs.	26.4	15	24.8	16	31.7	12	29.0	13	28.7	9
Draftsmen	30.6	10	29.5	12	35.6	9	32.9	9	19.4	17
Lawyers	10.1	32	12.4	27	6.4	32	1.9	33	4.3	33
QP Adult Ed. Tchrs.	25.7	16	19.0	20	26.2	16	23.9	17	22.1	14
Social Workers	16.9	24	17.1	22	31.2	13	21.9	19	19.4	17
Embalmers	12.4	29	5.7	33	6.4	32	8.4	31	6.2	31
QP Pre-KG & KG Tchrs.	23.5	19	21.9	19	26.2	16	14.2	25	22.9	13
Foresters	14.0	27	13.3	26	18.3	23	21.9	19	10.9	27
Newspaper Rprtrs.	13.7	28	12.4	27	14.9	27	9.0	30	8.9	29
Radio & TV anncrs.	12.4	29	6.7	32	8.9	30	6.5	32	5.0	32
QP Jr. & Sr. H.S. Tchrs.	19.2	22	11.4	29	16.3	26	10.3	28	14.0	23
QP Elmntry. Sch. Tchrs.	19.2	22	17.1	22	16.8	25	13.5	26	13.6	24
Librarians	11.1	31	8.6	31	13.4	29	10.3	28	10.9	27
Clergymen	8.1	33	9.5	30	6.9	31	12.3	27	11.6	26

QP = Qualified People For

FIGURE 2. Percentages of leaders citing serious and minor shortages of physicians in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.

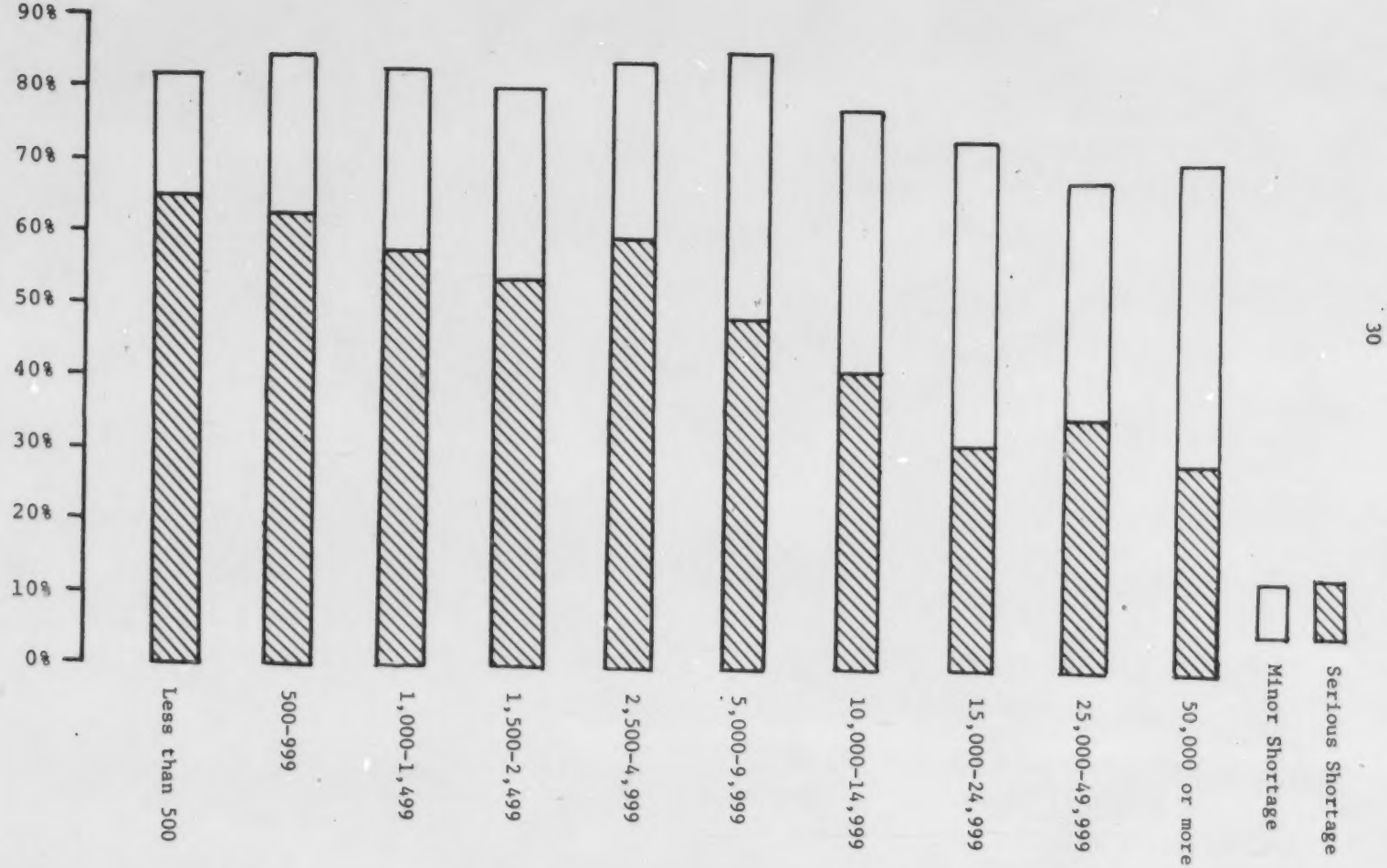


TABLE 11. Percentages of leaders indicating shortage (minor+major) in the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	COMMUNITY POPULATION									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	82.1	1	85.0	1	84.7	1	79.4	1	84.0	1
Dentists	69.0	2	71.4	2	68.4	2	68.6	2	68.4	2
Nurses	54.3	6	60.9	5	59.4	4	57.7	5	63.2	3
Optometrists	51.8	7	59.1	7	55.4	7	48.8	9	49.3	9
Veterinarians	47.8	9	59.1	7	55.9	6	58.7	4	53.4	8
Home Applnc. Rprmn.	55.1	5	66.0	3	63.9	3	62.6	3	60.9	4
QP Law Enfrcmnt.	58.5	4	61.5	4	56.3	5	53.4	7	55.4	6
Health Technicians	49.4	8	55.4	9	45.9	10	49.0	8	54.0	7
Plumbers	63.6	3	60.9	5	54.9	8	56.9	6	60.4	5
Surveyors	37.1	13	40.4	14	45.0	11	48.4	10	43.8	10
Recreational Wrkers.	44.1	10	42.8	10	48.2	9	45.2	11	43.3	11
Auto Mechanics	37.9	12	41.2	12	39.7	13	40.6	13	38.7	13
Pharacists	36.3	14	40.7	13	33.8	14	27.1	20	21.6	24
Architects	22.1	25	24.7	21	24.8	19	26.7	21	31.5	15
Ag. Eqpmnt. Rprmn.	43.6	11	42.2	11	40.6	12	43.4	12	38.9	12
Computer Spclsts.	18.0	31	18.0	27	14.5	29	16.0	27	22.9	22
Engineers	21.2	26	25.6	18	24.8	19	24.6	22	30.8	16
Accountants	32.3	16	35.2	15	32.5	15	33.1	14	32.0	14
P.R. Workers	28.2	18	25.3	19	24.3	21	27.8	18	28.8	19
Vocational Cnslrs.	32.7	15	28.3	16	27.1	17	27.4	19	29.5	17
Draftsmen	22.8	24	24.4	22	19.9	22	28.1	17	29.3	18
Lawyers	25.7	21	25.9	17	26.6	18	28.2	16	20.2	25
QP Adult Ed. Tchrs.	31.0	17	25.0	20	27.5	16	23.8	23	28.8	19
Social Workers	24.0	22	21.7	24	18.5	24	28.8	15	22.7	23
Embalmers	18.4	29	18.6	26	13.1	30	15.7	28	15.0	30
QP Pre-KG & KG Tchrs.	27.8	19	24.1	23	19.4	23	20.2	24	23.4	21
Foresters	18.8	28	19.0	25	15.8	27	17.4	25	16.0	28
Newspaper Rprtrs.	19.6	27	17.1	29	15. 8	27	17.0	26	15.2	29
Radio & TV Anncrs.	18.3	30	11.7	32	10.4	32	11.1	33	13.6	32
QP Jr. & Sr. H.S. Tchrs.	26.2	20	17.8	28	16.2	26	15.0	30	18.2	26
QP Elmntry. Sch. Tchrs.	23.6	23	16.0	30	16.7	25	15.0	30	17.5	27
Librarians	13.9	33	13.5	31	11.7	31	15.3	29	14.8	31
Clergymen	17.5	32	9.3	33	9.0	33	12.5	32	10.8	33

QP = Qualified People For

TABLE 11. Continued

Occupational Categories	Community Population									
	5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 and over	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	85.7	1	78.0	1	74.7	1	68.5	1	71.3	2
Dentists	56.1	6	64.7	3	54.9	5	45.8	7	50.8	5
Nurses	67.0	2	66.7	2	72.7	2	65.8	2	74.0	1
Optometrists	45.3	11	26.2	18	28.7	18	28.3	18	32.1	11
Veterinarians	48.5	9	54.3	6	50.0	8	44.6	8	36.8	8
Home Applnc. Rprmn.	63.6	3	57.2	4	60.8	3	51.6	6	48.9	6
QP Law Enfrcmnt.	60.2	4	50.5	8	54.5	6	59.3	4	59.0	4
Health Technicians	59.3	5	57.1	5	60.4	4	59.4	3	62.4	3
Plumbers	54.4	7	41.9	10	36.1	13	35.5	11	34.1	9
Surveyors	50.8	8	52.3	7	54.0	7	51.7	5	25.6	16
Recreational Wrkers.	35.5	15	22.8	21	24.3	21	29.0	17	21.4	18
Auto Mechanics	45.6	10	45.7	9	43.1	9	43.8	9	45.4	7
Pharmacists	23.1	23	23.8	20	19.8	25	21.3	23	26.3	15
Architects	36.8	14	38.1	12	26.2	20	22.6	22	7.8	30
Ag. Eqpmnt. Rprmn.	38.7	13	28.6	15	34.1	15	34.2	13	17.0	24
Computer Spclsts.	29.7	19	34.3	13	22.6	22	37.4	10	32.5	10
Engineers	26.8	20	39.1	11	39.1	10	31.6	14	18.6	21
Accountants	30.0	18	27.7	17	22.3	23	16.1	26	19.8	20
P.R. Workers	26.0	22	18.1	24	27.8	19	29.1	16	14.7	25
Vocational Cnslrs.	31.3	17	28.6	15	36.2	12	31.6	14	31.0	12
Draftsmen	39.7	12	31.4	14	39.1	10	35.5	11	21.3	19
Lawyers	13.0	32	13.4	28	7.4	32	3.8	33	4.7	33
QP Adult Ed. Tchrs.	32.9	16	22.8	21	30.7	16	26.5	19	29.1	13
Social Workers	22.8	24	19.0	23	34.2	14	25.8	20	22.5	17
Emblamers	16.6	28	6.7	33	9.4	31	9.7	30	6.2	31
QP Pre-KG & KG Tchrs.	26.4	21	24.8	19	29.2	17	20.7	24	27.6	14
Foresters	19.5	27	16.2	26	21.3	24	23.8	21	12.5	27
Newspaper Rprtrs.	15.7	29	15.3	27	15.4	28	9.6	31	10.5	29
Radio & TV Anncrs.	15.0	30	7.7	32	9.9	30	6.5	32	5.4	32
QP Jr. & Sr. H.S. Tchrs.	22.1	26	12.4	29	17.3	27	14.2	27	17.9	22
QP Elmntry. Sch. Tchrs.	22.8	24	18.1	24	18.3	26	17.4	25	17.1	23
Librarians	14.0	31	8.6	31	14.9	29	12.2	29	11.7	28
Clergymen	9.1	33	10.5	30	7.4	32	12.3	28	12.8	26

QP = Qualified People For

such responses came from the leaders living in a small bedroom or satellite communities that for their medical needs depend upon some adjacent large communities.

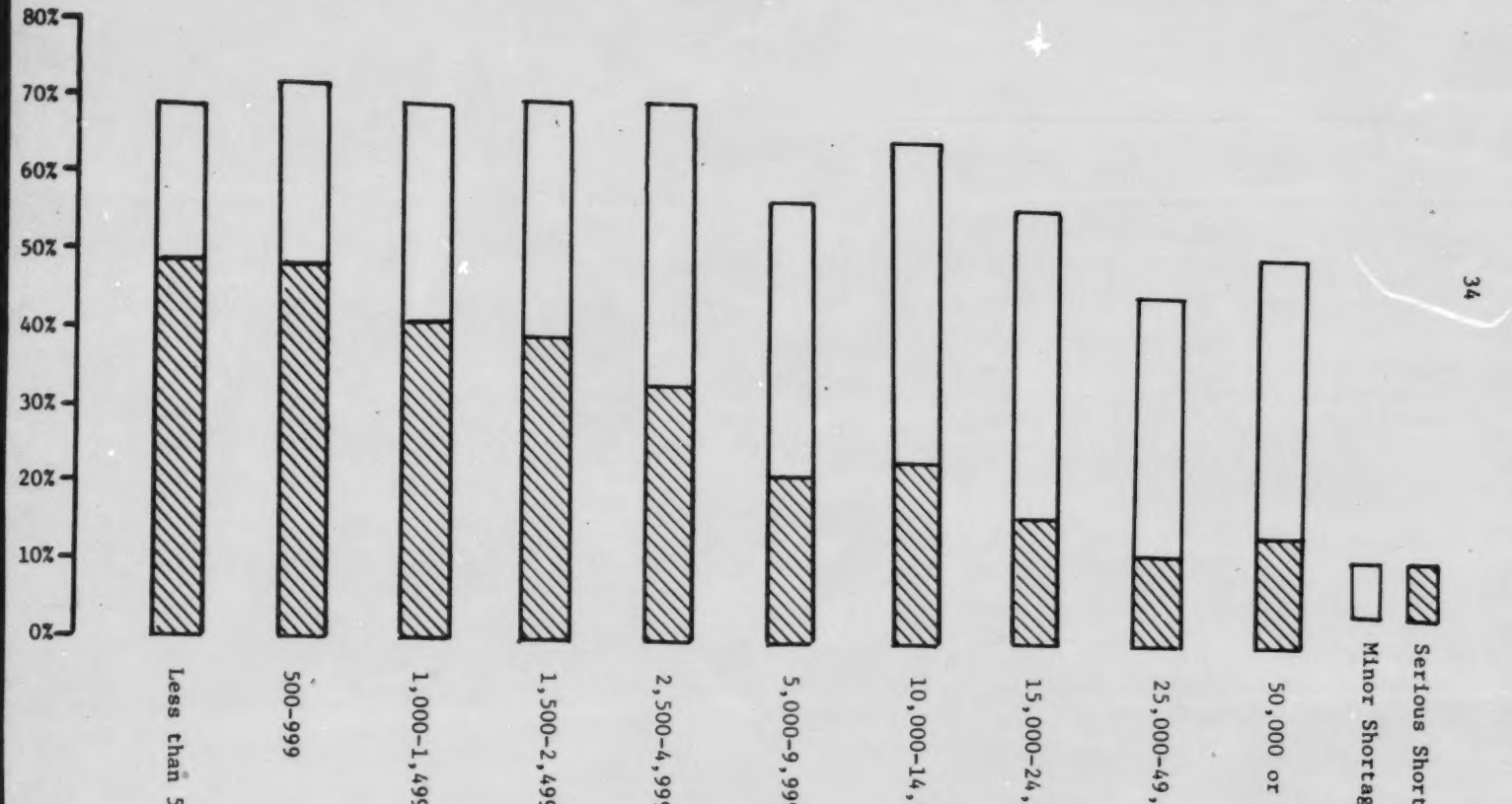
Availability of Dentists and Community Size:

As indicated elsewhere, dentists were a distant second to physicians in terms of the proportion of leaders indicating a serious shortage (Table 8). Further, in terms of the combined proportion of respondents indicating shortage (serious + minor) dentists ranked third (62.9%) behind physicians (80.4%) and nurses (63.4%).

As in the case of physicians, the larger the community size the smaller was the proportion that perceived shortage of dentists. In fact, respondents from large communities seemed to percieve a sufficient supply of dentists vis-a-vis the supply of physicians. While the proportion indicating shortage of physicians declined from 82.1 percent for communities with less than 500 to 71.3 percent for communities with over 50,000 people, the comparable proportions indicating shortages of dentists declined from 69.0 percent to 50.8 percent (Table 11 and Figure 3). The differences are even more pronounced in the proportions indicating a serious shortage. While for physicians, the proportions ranged from 65.4 percent for the smallest communities to 35.6 percent for the largest community size, for dentists they ranged from 49.0 percent to 14.0 percent.

Minor shortages seem to be more prevalent in medium-sized communities than either the smaller or larger communities. For example, 40.9 percent of the respondents from 10,000 to 14,999 population category reported minor shortage in comparison to 36.8 percent for 50,000 and

FIGURE 3. Percentages of leaders citing serious and minor shortages of dentists in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.



over communities and 20.0 percent for communities with less than 500 people (Table 10).

Availability of Nurses and Community Size:

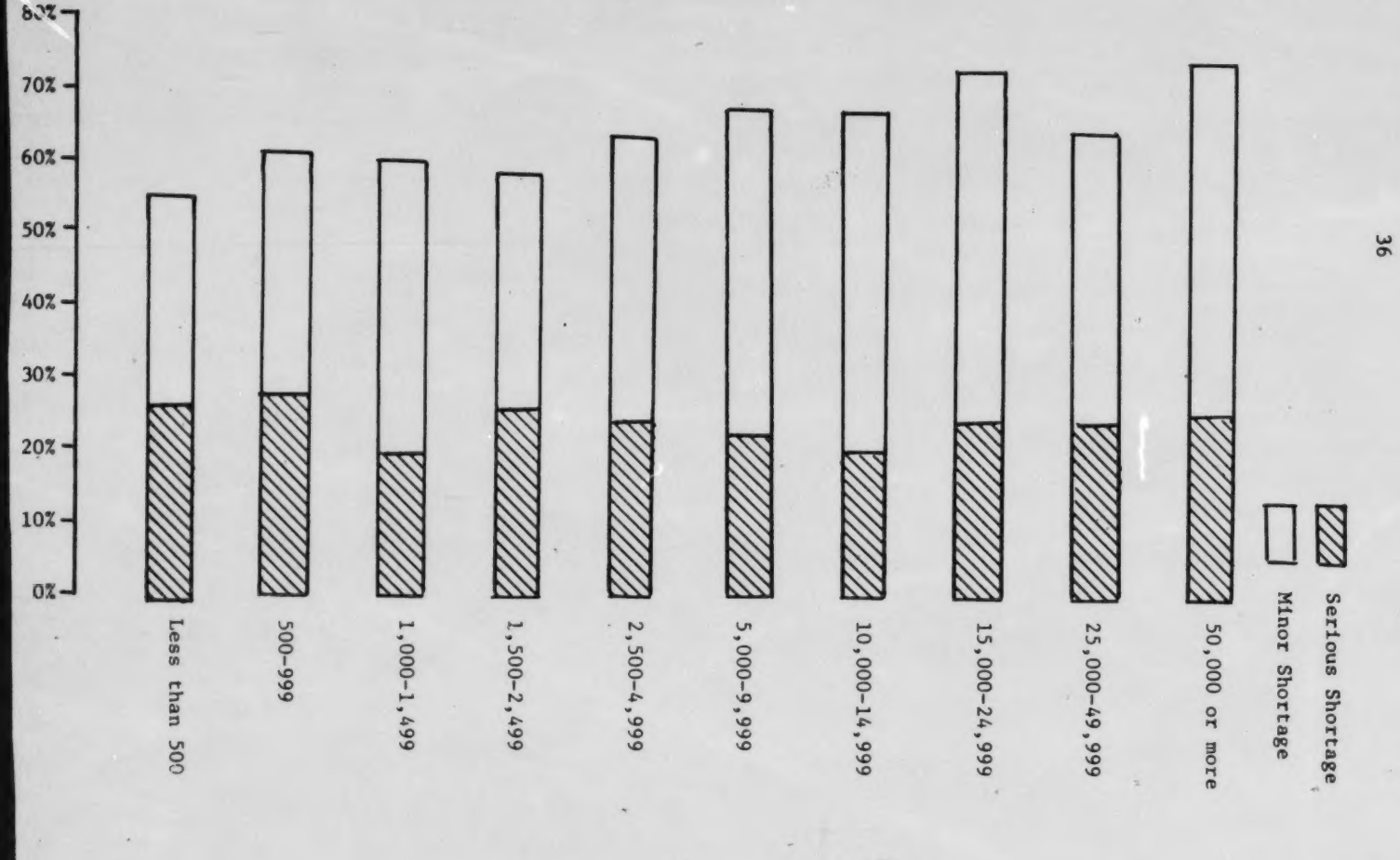
Nurses ranked second in terms of the proportion of leaders reporting a serious shortage and ranked third in terms of combined proportion (62.9%) reporting an overall shortage.

The extent of the perceived serious shortage of nurses does not seem to vary greatly by the community size. In most of the community size categories, 20-25 percent of the leaders reported a serious shortage (Table 9 and Figure 4). On the other hand, the situation with regard to minor shortage of nurses is somewhat different. Fewer leaders from communities with less than 500, 500 to 999, and 1,500 to 2,499 residents reported a minor shortage than from communities of other sizes (Table 10 and Figure 4). The result is that the overall shortage seems to be a little worse in larger communities than in smaller communities. This, as the reader will recall, is opposite from the situation regarding the availability of physicians and dentists.

Availability of Optometrists and Community Size

Previously it was reported that there were only eight categories in which at least a majority of the 2,599 leaders indicated either a shortage or minor shortage. Optometrists were not on that list. However, the situation is more complicated than that and needs elaboration. When one considers the proportion of leaders who indicated a serious shortage of optometrists in their communities, they rank fourth after physicians, dentists and nurses, indicating that a shortage of optometrists in North Carolina is a serious problem.

FIGURE 4. Percentages of leaders citing serious and minor shortages of nurses in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.

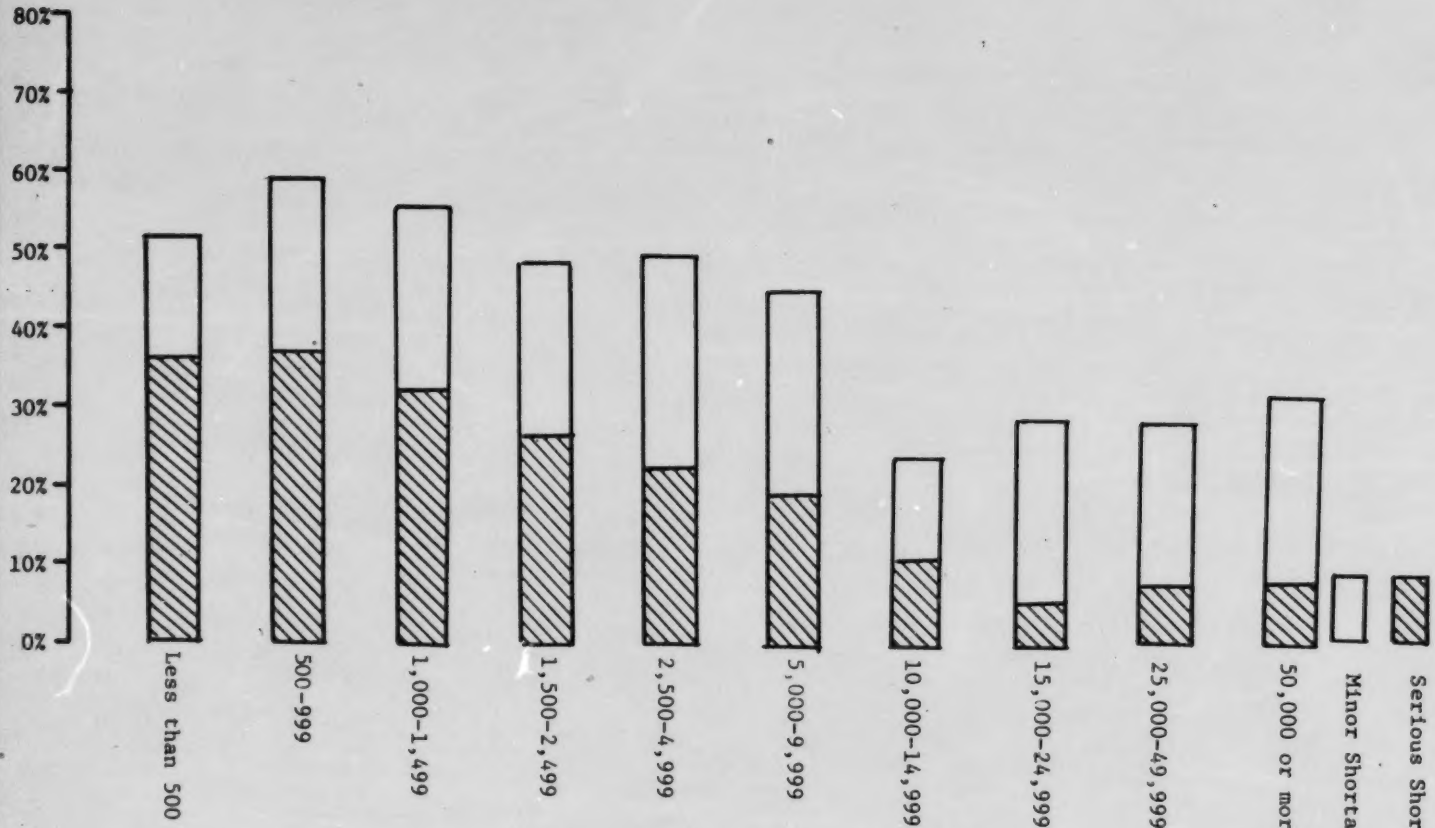


The variation in percent of the perceived serious shortage from one community size to another shows a somewhat different pattern from those shown by the data for physicians, dentists, and nurses. Here, the proportion of leaders indicating a serious shortage (Table 8) declines as the community size increases from less than 500 (36.3%), to 15,000 to 24,999 (5.9%), and, again, it goes slightly up as the community size increases to 50,000 or more (8.1%). Also, minor shortages seem to be more prevalent in communities with 2,500 to 15,000 people than communities that are smaller or larger than these (Table 10 and Figure 5). In summary, the data show that medium-sized communities are comparatively better served as far as the availability of optometrists is concerned.

Availability of Veterinarians and Community Size:

The data show a perceived shortage of veterinarians throughout the surveyed communities. Veterinarians ranked fifth in the serious shortage category (Table 8). Empirically, this finding supports the recent action of the North Carolina Legislature in providing for a School of Veterinary Medicine at N. C. State University. Some of the exponents of this action have argued that a Veterinary School in North Carolina has not yet become a reality because veterinarians are needed more in small rural communities than large ones; however, these communities have not been able to bring interest to bear on this point. The data provide evidence to the contrary. Table 12 shows that the proportions of leaders who reported that they neither had nor needed a veterinarian in their community were much higher in smaller communities than in larger communities.

FIGURE 5. Percentages of leaders citing serious and minor shortages of optometrists in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.



Other than the observation made above, the pattern of variation of the availability of veterinarians from one community size to another is quite similar to that for optometrists, dentists and physicians. Generally speaking, the larger the community the smaller is the proportion reporting serious shortage (Table 9) while a minor shortage is more frequently perceived in the medium-sized communities than either in larger metropolitan areas or small communities (Table 10 and Figure 6).

Availability of Home Appliance Reparimen and Community Size:

With the very rapid increase in the proportion in the U. S. population owning an increasing number of home appliances, it is not surprising that the perceived shortage (59.7%) of home appliance reparimen ranked so high (Table 8).

The shortage of home appliance repairmen seemed to be a little less prevalent in the very small (less than 500) and the larger communities (over 25,000) than in other sizes (Table 11). Perceived serious shortage, on the other hand, had a clearer relationship to community size. Generally speaking, the larger the community the smaller was the proportion citing serious shortage (Table 9). Minor shortage was not reported more frequently in any systematic way in one community size or another (Figure 7).

Availability of Qualified People for Law Enforcement and Community Size

This section does not deal with the leaders' perception of whether or not they had enough law enforcement officers in their communities. Rather, the data deal with the leaders' perceptions of the availability of qualified people for law enforcement positions in their communities.

FIGURE 6. Percentages of leaders citing serious and minor shortages of veterinarians in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.

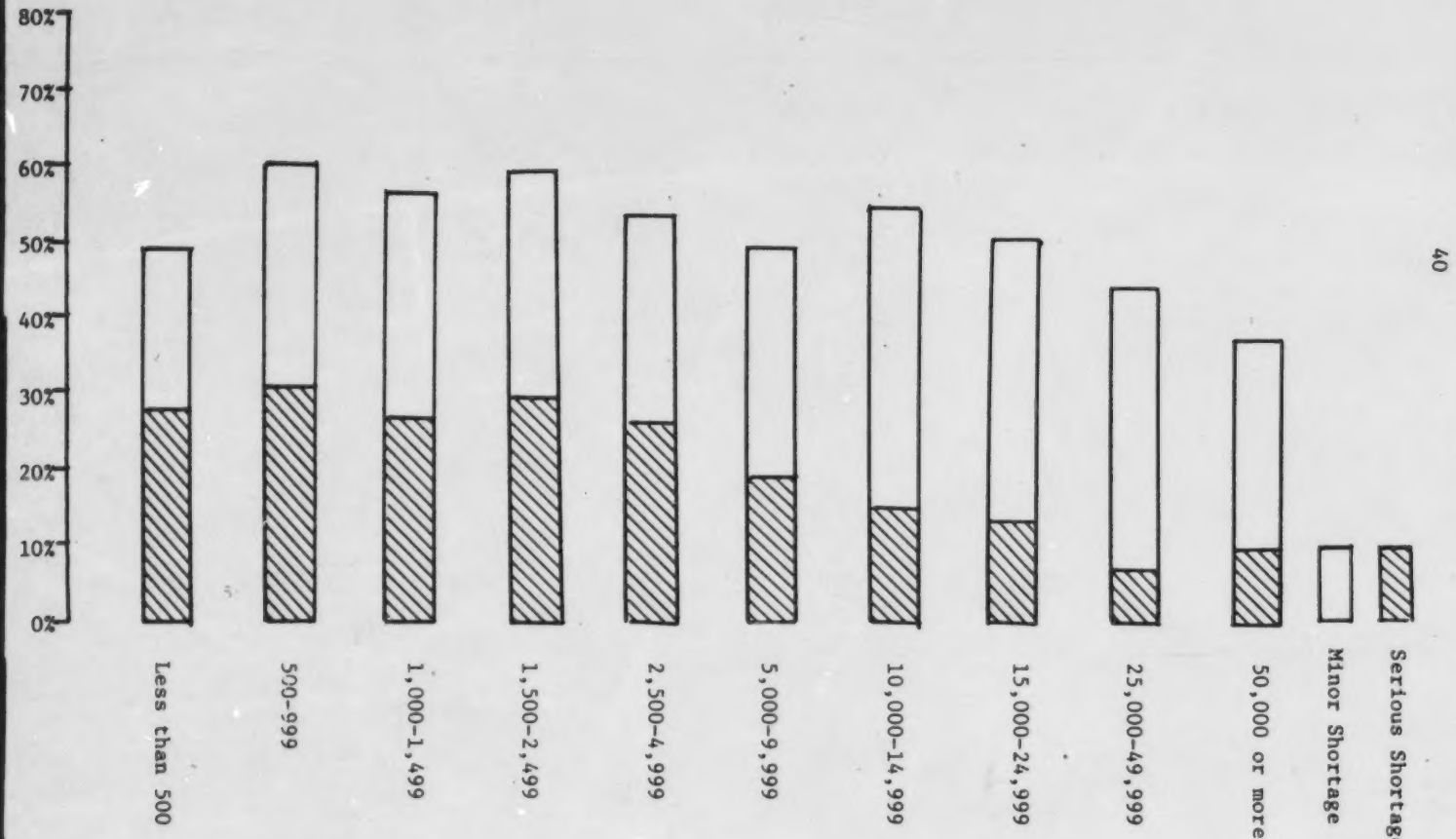
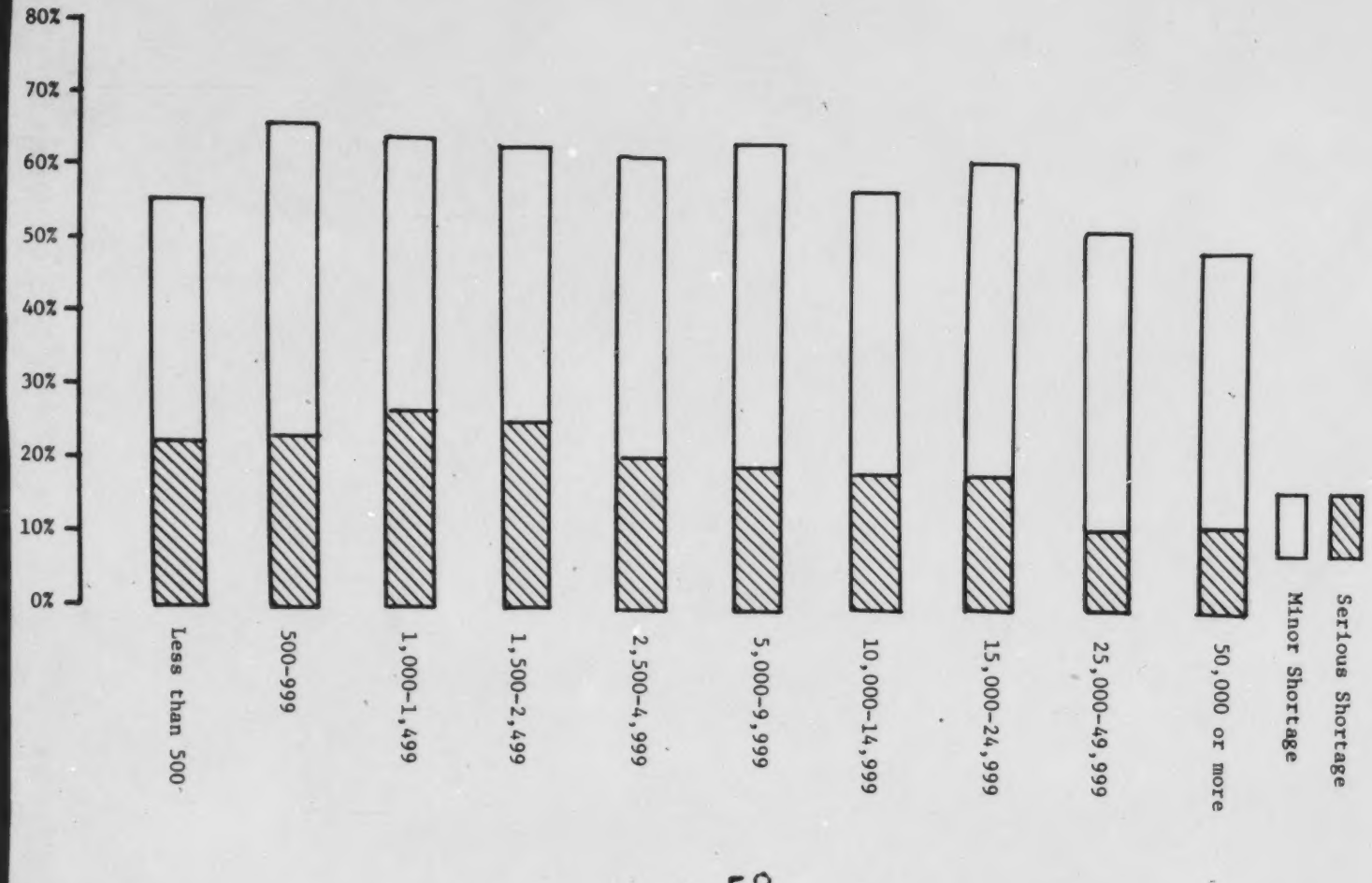


FIGURE 7. Percentages of leaders citing serious and minor shortages of home appliance repairmen in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.



It was rather surprising that the perceived shortage of qualified people for law enforcement positions ranked fifth (57.1%). The percentages of the leaders reporting this do not show any clear-cut pattern of variation from one community size to another. In the ten community size categories, at least half the respondents reported a shortage (Table 11 and Figure 8). Conversely, looking at the percentages reporting a serious shortage, an interesting pattern develops. Serious shortages seem to be more prevalent in very small and very large metropolitan communities. Generally speaking, as the community size increases from "less than 500" to "25,000 to 49,999", the percentage reporting serious shortage declines, and then rises again for communities of 50,000 or more inhabitants (Table 9 and Figure 8).

Availability of Health Technicians and Community Size:

In an earlier section it was noted that the pattern of shortages for nurses was substantially different from the patterns of other medical professional categories. Although the frequencies citing shortages of health technicians are smaller than those citing shortages of nurses, their pattern of variation by community size is quite similar to that for nurses (Compare Figures 4 and 9). The overall shortages seem to be more prevalent in larger communities and serious shortages more prevalent in very small communities (Tables 9, 11 and Figure 9).

Availability of Plumbers and Community Size:

Plumbers ranked eighth in the overall shortage category. The pattern of shortages among the various community sizes is somewhat different from those previously discussed. For example, unlike the

FIGURE 8. Percentages of leaders citing serious and minor shortages of qualified people for law enforcement positions in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.

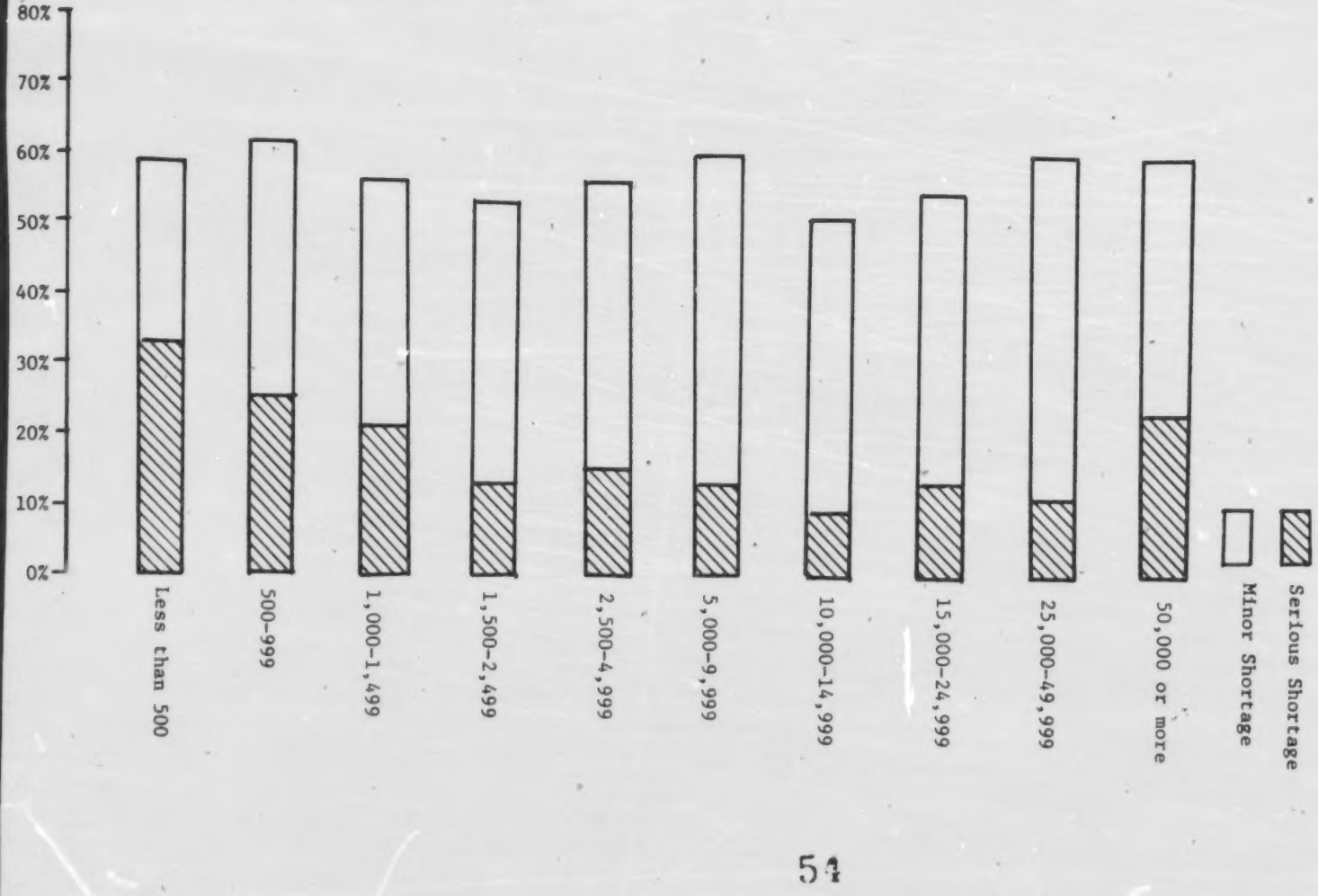
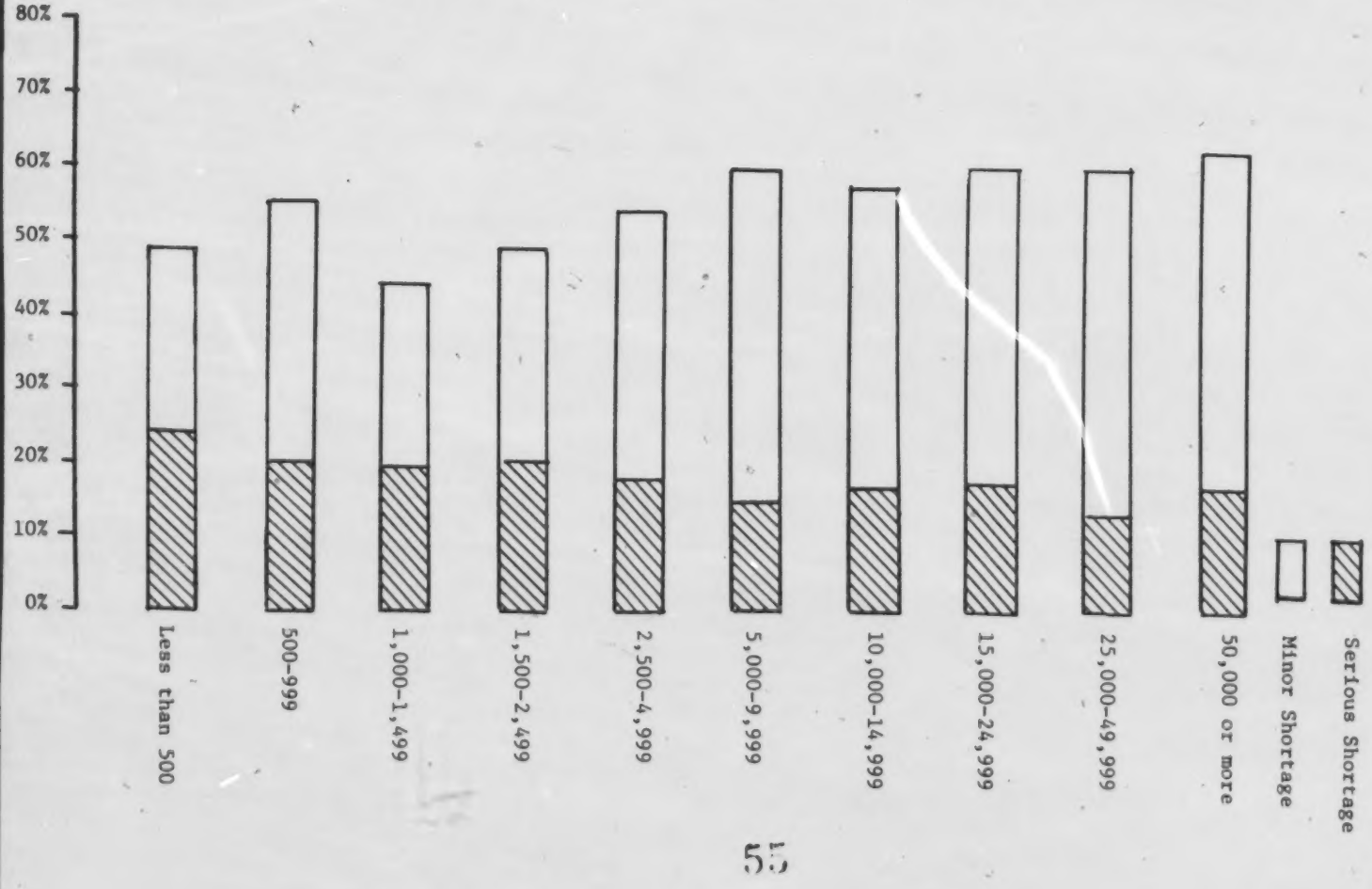


FIGURE 9. Percentages of leaders citing serious and minor shortages of health technicians in North Carolina communities of different sizes, Survey of Professionals' Availability, North Carolina, 1975.

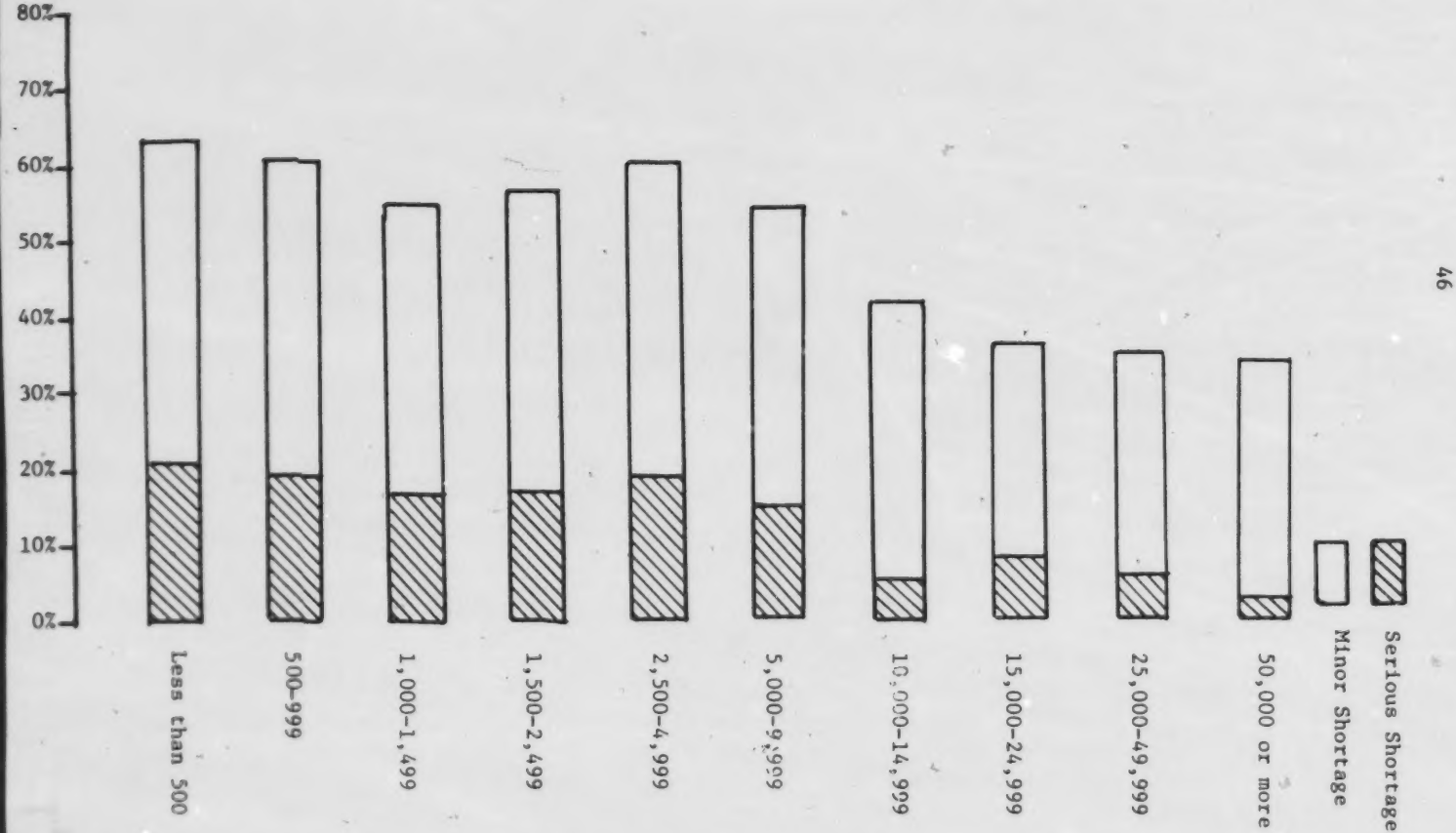


pattern of shortages for physicians and dentists where smaller communities cited serious shortages more frequently but minor shortages less frequently, in the case of plumbers the percentages for both the serious and minor shortages categories were higher in small communities (Tables 9, 10 and Figure 10). While the frequency of citation of serious shortages declined from 20.4 percent for communities with less than 500 people to 2.7 percent for cities with 50,000 or more inhabitants, the comparable proportion for minor shortages declined from 43.2 percent to 31.4 percent. These data, along with the fact that negligible proportions indicated neither having nor needing plumbers, show the seriousness of this shortage especially in the small communities of North Carolina.

Availability of Surveyors and Community Size

With regard to an adequate supply of surveyors in North Carolina, the data do not show a clear consensus based on a majority opinion. Less than half of the leaders (43.7%) indicated shortages, another less than half (49.2%) indicated no shortages and the rest (7.1%) did not make an interpretable response (Table 8). However, to the "no shortage" category there are exceptions. In community sizes 5,000 to 9,999, 10,000 to 14,999, 15,000 to 24,999 and 25,000 to 49,999 at least a majority of the leaders indicated a shortage. The very large and small communities, therefore, seem to have a perceived sufficiency of surveyors (Table 11).

FIGURE 10. Percentages of leaders citing serious and minor shortages of plumbers in North Carolina communities in different sizes, Survey of Professionals' Availability, North Carolina, 1975.



Availability of Professionals in the Other Twenty-three Categories and Community Size:

For the remaining twenty-three professional categories at least a majority of the leaders did not believe there were shortages in their communities (Table 8).

The no shortage situation varied from one community to another (Table 13). Four different patterns can be observed. First, for some categories, the larger the community the more adequate was the supply of the professionals. Here the proportions of respondents indicating no shortage increased with the increasing size of the community. The categories showing this pattern are recreation workers, agricultural equipment repairmen, accountants, lawyers, newspaper reporters, and radio and television announcers. In the case of computer specialists the pattern was opposite.

A second type of pattern is shown by the perceived supply of pharmacists, embalmers, librarians and clergymen. The no shortage percentages seem to resemble a bell-shaped curve, indicating that medium sized communities were adequately served in comparison to small or large communities.

A third type pattern is exhibited by architects and draftsmen. In this pattern the curve is inverted. Here both the small and large communities seem to be a little better supplied than the medium sized communities.

The availability of surveyors and public relations workers exhibits a fourth pattern. In this case, the larger metropolitan communities with 50,000 or more inhabitants seemed to have a sufficiency of supply

TABLE 12. Percentages of leaders indicating "none needed and none available" (not applicable) to the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community Population									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	5.3	29	1.2	30	2.3	27	0.7	30	1.5	28
Dentists	9.4	24	3.0	27	2.7	24	1.1	27	2.7	23
Nurses	11.0	22	8.1	21	5.4	21	5.3	20	3.9	20
Optometrists	18.4	14	9.6	20	8.1	16	9.3	14	5.2	15
Veterinarians	17.1	15	10.8	16	10.8	13	6.8	16	4.7	17
Home Applnc. Rprmn.	4.9	30	2.1	28	1.4	30	0.7	30	1.0	30
QP Law Enforcmnt.	2.0	33	0.6	32	1.4	30	0.4	33	0.7	32
Health Technicians	19.2	13	13.6	13	13.1	10	15.7	8	7.9	10
Plumbers	2.9	31	0.3	33	0.9	32	1.4	24	0.2	33
Surveyors	14.7	19	13.9	12	10.8	13	8.9	15	7.1	13
Recreational Wrkers.	12.2	21	10.2	18	6.8	19	5.7	17	2.2	26
Auto Mechanics	2.9	31	0.9	31	0.5	33	1.1	27	1.0	30
Pharmacists	15.9	18	5.4	22	3.2	23	0.7	30	2.0	27
Architects	40.4	4	36.8	4	31.1	4	30.2	3	23.9	2
Ag. Eqpmnt. Rprmn.	12.7	20	10.5	17	9.0	15	5.3	20	9.1	8
Computer Spclsts.	51.8	1	54.9	1	53.5	1	48.7	1	36.7	1
Engineers	43.7	2	39.8	3	28.4	5	29.9	4	21.2	6
Accountants	16.3	16	9.9	19	6.3	20	5.3	20	4.7	17
P.R. Workers	29.3	8	29.2	6	23.0	7	18.9	7	14.3	7
Vocational Cnslrs.	23.3	11	17.5	11	11.7	11	10.0	10	7.4	11
Draftsmen	36.4	5	34.1	5	37.2	3	28.4	5	21.9	5
Lawyers	22.4	12	13.6	13	7.7	17	5.7	17	3.9	20
QP Adult Ed. Tchrs.	9.0	25	5.4	22	4.1	22	1.8	23	4.2	19
Social Workers	16.3	16	11.4	15	7.4	18	9.6	12	7.1	13
Embalmers	26.9	10	18.1	10	11.3	12	10.0	10	7.4	11
QP Pre-KG & KG Tchrs.	9.0	25	3.6	25	2.7	24	1.1	27	2.7	23
Foresters	27.8	9	24.1	8	20.7	8	26.7	6	22.7	3
Newspaper Rprtrs.	29.4	7	26.2	7	23.9	6	15.7	8	9.1	8
Radio & TV Annors.	43.4	3	41.7	2	42.2	2	34.9	2	22.4	4
QP Jr. & Sr. H.S. Tchrs.	11.0	22	5.4	22	2.7	24	3.2	22	3.2	22
QP Elmntry. Sch. Tchrs.	8.2	27	3.3	26	2.3	27	1.4	24	2.5	25
Librarians	30.2	6	19.3	9	14.0	9	9.6	12	4.9	16
Clergymen	6.5	28	1.8	29	1.8	29	0.7	30	1.2	29

QP = Qualified People For

TABLE 12. Continued

Occupational Categories	Community Population									
	5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 and over	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Physicians	0.0	32	0.0	25	0.0	31	0.6	13	0.4	20
Dentists	0.3	29	0.0	25	0.5	23	0.6	13	0.4	20
Nurses	1.0	23	0.0	25	0.5	23	0.0	25	0 4	20
Optometrists	0.3	29	1.0	14	0.5	23	0.0	25	0.4	20
Veterinarians	1.0	23	1.9	9	1.0	13	0.0	25	0.4	20
Home Applnc. Rprmn.	0.0	32	0.0	25	0.5	23	0.0	25	1.6	6
QP Law Enfrcmnt.	0.3	29	1.0	14	0.0	31	0.0	25	0.0	30
Health Technicians	1.6	18	0.0	25	1.0	13	0.6	13	0.4	20
Plumbers	0.7	26	0.0	25	1.0	13	0.6	13	0.8	10
Surveyors	1.3	21	0.0	25	1.0	13	0.6	13	0.0	30
Recreational Workers	2.6	12	1.9	9	0.0	31	0.0	25	0.0	30
Auto Mechanics	0.3	29	0.0	25	0.5	23	0.6	13	0.4	20
Pharmacists	0.7	26	0.0	25	0.5	23	0.0	25	0.4	20
Architects	18.2	2	5.7	4	5.9	4	1.3	7	1.2	8
Ag. Eqpmnt. Rprmn.	5.2	8	5.7	4	6.9	3	4.5	3	10.9	2
Computer Spclsts.	29.6	1	12.4	1	8.9	2	5.8	2	1.6	6
Engineers	11.1	4	7.6	3	3.0	7	3.2	5	0.0	30
Accountants	2.3	14	0.0	25	1.0	13	0.0	25	0.0	30
P.R. Workers	7.2	7	1.9	9	5.9	4	1.3	7	1.9	4
Vocational Cnslrs.	2.6	12	1.0	14	2.0	8	1.3	7	0.4	20
Draftsmen	9.4	5	1.9	9	1.5	9	4.5	3	0.4	20
Lawyers	1.6	18	0.0	25	0.5	23	0.0	25	0.4	20
QP Adult Ed. Tchrs.	1.6	18	0.0	25	0.5	23	0.0	25	0.4	20
Social Workers	2.9	10	1.9	9	0.0	31	0.0	25	0.0	30
Embalmers	2.6	12	0.0	25	1.0	13	0.0	25	2.3	3
QP Pre-KG & KG Tchrs.	1.3	21	0.0	25	0.5	23	0.0	25	0.4	20
Foresters	12.7	3	9.5	2	10.9	1	7.7	1	11.2	1
Newspaper Rprtrs.	3.6	9	1.0	14	1.0	13	0.0	25	0.8	10
Radio & TV Anncrs.	8.1	6	4.8	6	4.0	6	0.6	13	0.8	10
QP Jr. & Sr. H.S. Tchrs.	2.0	15	0.0	25	0.5	23	0.0	25	0.4	20
QP Elmntry. Sch. Tchrs.	1.3	21	0.0	25	0.5	23	0.0	25	0.4	20
Librarians	2.0	15	1.0	14	1.0	13	0.6	13	1.9	4
Clergymen	0.7	26	0.0	25	0.5	23	0.6	13	0.8	10

QP = Qualified People For

TABLE 13. Percentages of leaders indicating sufficiency of, oversupply, or neither having nor needing professionals, in the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community Size									
	Less than 500	500 to 999	1,000 to 1,499	1,500 to 2,499	2,500 to 4,999	5,000 to 9,999	10,000 to 14,999	15,000 to 24,999	25,000 to 49,999	50,000 or over
Physicians	12.6	12.9	12.2	18.1	14.3	11.4	19.1	23.8	28.3	24.0
Dentists	23.7	22.6	27.5	28.2	29.1	38.4	33.4	42.6	51.0	43.4
Nurses	33.0	32.8	34.7	34.5	31.9	26.5	27.6	22.8	29.7	18.6
Optometrists	36.4	32.2	36.5	41.6	45.5	49.5	60.0	67.8	67.8	60.9
Veterinarians	38.3	34.6	36.0	33.5	40.9	45.3	41.9	48.5	48.3	54.7
Home Applnc. Rprmn.	34.7	29.5	32.9	31.7	35.2	30.9	37.1	36.7	43.9	43.7
QP Law Enfrcmnt.	34.6	34.0	39.6	40.6	41.4	35.2	42.8	44.5	36.8	36.7
Health Technicians	36.7	36.2	43.3	41.0	36.4	29.3	36.2	34.2	31.6	29.5
Plumbers	35.6	33.7	39.7	39.9	37.4	42.7	49.5	61.9	60.0	59.7
Surveyors	50.2	51.8	47.3	42.7	51.0	43.0	43.9	44.0	45.1	60.2
Recreational Wrkers.	41.2	47.0	42.3	43.8	49.6	55.1	71.5	68.3	62.0	70.5
Auto Mechanics	48.6	52.2	54.9	52.6	56.9	48.5	46.7	53.4	51.0	49.2
Pharamacists	50.6	52.4	60.3	66.2	72.7	70.7	73.3	77.2	74.8	66.7
Architects	62.0	66.9	66.6	61.2	58.9	55.7	54.3	71.3	72.2	86.4
Ag. Eqpmnt. Rprmn.	43.3	49.4	53.1	46.3	53.5	51.2	60.0	57.0	54.2	60.5
Computer Spclsts.	64.0	71.2	74.2	70.8	67.7	56.0	55.2	47.5	51.0	55.1
Engineers	63.7	66.3	65.3	64.7	61.6	54.7	52.3	55.5	61.3	74.8
Accountants	53.4	57.9	60.3	57.3	62.8	63.5	67.5	75.2	78.1	74.8
P.R. Workers	57.5	64.8	63.1	60.8	62.3	63.9	73.3	65.3	63.2	78.3
Vocational Cnslrs.	53.8	61.2	57.6	60.1	61.9	56.6	60.0	57.9	59.4	59.3
Draftsmen	60.1	64.2	68.8	59.1	62.3	49.6	60.0	56.9	56.8	71.7
Lawyers	60.0	66.3	68.0	64.7	75.1	80.5	81.8	91.9	91.0	91.4
QP Adult Ed. Tchrs.	52.7	61.7	60.3	64.8	60.1	52.4	67.7	64.3	65.8	62.8
Social Workers	63.3	69.9	72.0	61.9	69.9	69.1	77.2	63.8	69.0	70.5
Embalmers	66.1	72.1	78.8	73.6	79.6	76.2	87.6	87.6	81.9	80.6
QP Pre-KG & KG Tchrs.	57.5	65.4	70.0	70.2	69.9	60.9	67.8	66.3	70.3	63.8
Foresters	65.7	70.2	72.5	69.4	73.9	66.8	69.5	71.8	65.2	67.0
Newspaper Rprtrs.	67.6	73.0	73.4	74.0	79.1	76.5	79.9	79.6	83.9	82.5
Radio & TV Anncrs.	67.4	77.8	77.4	78.6	79.0	75.2	87.5	85.1	81.5	84.5
QP Jr. & Sr. H.S. Tchrs.	58.7	69.9	74.3	73.6	74.5	66.8	79.0	77.7	73.3	76.3
QP Elmntry. Sch. Tchrs.	60.9	73.5	74.7	75.0	74.9	65.8	73.3	76.3	76.1	76.3
Librarians	71.0	78.7	78.8	77.6	78.1	78.2	85.7	80.6	82.0	78.2
Clergymen	69.4	82.3	85.1	77.2	82.8	85.4	84.7	89.6	82.5	79.1

over all of the other community size categories. For the remaining eight professional categories, no systematic pattern of variation by community size is readily apparent.

The Relationship of the Leaders' Sex and Elected Status to the Nature and Extent of Perceived Shortages

With the decision to use municipal and other leaders as the population base for the sample, little control could be exercised to give equal representation to man and women. Consequently, the leaders in the survey were predominantly male. However, enough female leaders responded to give a reasonable picture of their views with respect to shortages of professionals. In gereral, the percentages of females who indicated shortages were similar to those indicated by males (Tables 14 and 15). This fact shows that female leaders tended to look at the shortages of professionals not from a sex standpoint but from the viewpoint of community needs.

The female leaders indicated the health professions as having the most serious shortages and physician shortage was cited by more than any other category. The range of responses varied from 83.4 percent in towns of less than 500 inhabitants to 100.0 percent in cities with 5,000 to 9,999 individuals while declining to 50.0 percent in cities of 25,000 to 49,999 people.

Generally, the response tendencies of female leaders in the rural communities was within a range of 5 to 7 percentage points of their counterpart male leaders for the various professional categories. However, the gap increased as the size of the community increased. The reporting of shortages and sufficiencies of professionals by female

TABLE 14. Percentages of leaders indicating shortage -(serious + minor) in the thirty-three professional/occupational categories by community size and by sex, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community population									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	M	F	M	F	M	F	M	F	M	F
Physicians	82.1	83.4	83.1	95.3	85.2	83.9	79.9	72.0	83.8	86.5
Dentists	70.9	62.5	71.1	76.2	69.9	61.3	71.1	48.0	68.4	73.0
Nurses	53.9	52.1	61.3	64.4	64.6	32.3	59.5	40.0	64.2	56.8
Optometrists	51.9	54.2	57.0	73.8	57.2	48.4	50.3	36.0	49.0	48.6
Veterinarians	48.2	48.0	58.1	66.7	58.8	42.0	60.3	48.0	54.5	43.2
Home Applnc. Rprmn.	56.6	52.1	64.1	73.9	65.6	54.9	62.7	60.0	61.7	54.1
QP Law Enfrcmnt.	57.1	62.5	61.6	59.5	59.8	35.5	53.8	48.0	55.1	59.5
Health Technicians	49.3	43.8	57.1	47.6	50.3	22.6	51.4	32.0	55.4	43.3
Plumbers	55.6	50.1	59.5	73.9	55.1	54.9	55.9	60.0	61.8	48.6
Surveyors	37.1	37.5	40.9	40.4	49.7	19.4	49.4	32.0	44.6	37.8
Recreational Wrkers.	44.5	45.9	42.3	45.2	48.2	51.6	46.6	28.0	44.1	37.8
Auto Mechanics	38.7	33.3	41.9	38.1	41.3	29.1	41.4	28.0	38.6	40.5
Pharmacists	32.9	48.0	40.1	47.6	33.8	32.3	28.9	8.0	20.9	24.3
Architects	20.6	29.2	24.6	28.6	27.5	9.7	26.5	28.0	30.5	37.8
Ag. Eqpmnt. Rprmn.	45.5	35.5	43.3	38.1	42.9	29.1	46.2	20.0	39.7	35.1
Computer Spclsts.	15.8	27.1	18.7	16.7	15.9	6.5	16.0	16.0	22.3	27.0
Engineers	19.5	29.1	25.7	20.5	25.9	19.4	25.7	16.0	30.6	29.7
Accountants	30.2	39.6	36.6	30.9	33.3	29.0	34.9	20.0	32.2	32.4
P.R. Workers	28.0	31.2	24.7	30.9	27.0	9.7	28.9	12.0	28.9	29.7
Vocational Cnslrs.	30.6	41.7	26.7	38.1	29.1	16.1	28.9	12.0	30.3	27.0
Draftsmen	21.7	27.1	24.0	28.6	22.2	6.5	29.3	12.0	29.8	24.3
Lawyers	25.9	27.1	25.0	30.9	24.8	35.5	28.9	16.0	19.5	27.0
QP Adult Ed. Tchrs.	34.4	20.8	25.4	21.5	30.7	9.7	24.5	12.0	31.1	8.1
Social Workers	23.3	27.1	21.8	21.5	20.6	6.4	29.7	20.0	22.0	29.7
Embalmers	16.9	22.9	18.4	23.8	13.7	9.7	16.1	4.0	15.1	10.8
QP Pre-KG & KG Tchrs.	29.6	20.8	25.4	14.3	22.7	0.0	21.3	8.0	24.8	13.5
Foresters	17.0	25.1	19.4	19.0	17.4	6.4	18.0	8.0	16.5	10.8
Newspaper Rprtrs.	18.0	25.0	16.2	26.2	16.4	12.9	18.0	0.0	15.5	13.5
Radio & TV Anncrs.	16.9	25.0	10.5	21.4	11.6	3.2	11.6	0.0	14.6	5.4
QP Jr.&Sr. H.S. Tchrs.	27.0	25.0	19.0	9.5	19.1	0.0	14.8	12.0	18.7	16.2
QP Elmntry Sch. Tchrs.	24.3	22.9	16.9	7.2	19.6	0.0	15.2	8.0	18.4	10.8
Librarians	12.2	20.8	12.7	18.0	12.1	9.7	15.2	16.0	15.4	8.1
Clergymen	17.4	18.7	10.2	4.8	9.5	6.4	12.4	12.0	11.0	10.8

QP = Qualified people for

TABLE 14. Continued

Community population											
5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 to over		All	
M	F	M	F	M	F	M	F	M	F	M	F
84.2	100.	76.6	90.0	75.4	60.0	69.4	50.0	72.3	61.1	80.1	83.2
55.4	56.5	63.9	70.0	57.4	20.0	47.2	12.5	50.4	55.5	63.6	61.0
68.4	47.8	63.9	90.0	73.8	50.0	67.4	50.0	74.8	66.7	65.0	52.8
55.7	47.8	34.0	60.0	30.2	10.0	29.8	0.0	29.5	61.1	45.2	50.6
50.7	30.4	56.4	40.0	52.0	30.0	43.8	62.5	36.4	44.4	51.9	47.1
64.0	60.9	55.3	80.0	61.3	50.0	52.1	37.5	47.9	50.0	59.8	58.6
57.9	82.7	52.2	40.0	54.1	50.0	59.7	50.0	59.0	50.0	57.6	56.3
59.8	47.9	56.4	60.0	61.2	40.0	59.0	50.0	61.6	72.3	56.1	43.6
53.6	69.6	39.3	60.0	35.5	20.0	36.9	12.5	32.9	33.3	50.7	54.4
51.1	47.8	51.1	70.0	56.3	20.0	51.4	50.0	27.8	5.6	45.0	34.4
36.4	30.4	23.4	20.0	24.6	20.0	29.1	25.0	21.8	16.7	37.5	37.2
48.2	26.0	45.7	50.0	44.3	10.0	43.7	37.5	44.4	50.0	42.5	34.9
23.3	21.7	25.5	10.0	20.2	0.0	21.6	25.0	25.7	33.3	27.2	30.6
38.1	26.1	37.2	40.0	25.7	20.0	22.9	12.5	7.7	5.6	25.9	25.2
40.7	26.1	27.6	40.0	34.4	20.0	31.1	75.0	18.0	0.0	37.6	30.6
29.1	34.7	34.0	40.0	42.0	20.0	37.5	25.0	31.7	33.4	25.0	23.0
37.1	34.8	41.5	20.0	37.7	40.0	31.3	50.0	19.2	11.1	28.6	26.1
29.8	30.4	28.7	20.0	21.9	20.0	15.3	25.0	18.8	22.3	29.2	29.5
27.3	17.4	18.1	20.0	26.8	30.0	28.5	25.0	15.8	0.0	25.9	22.2
30.9	30.4	29.8	20.0	37.7	20.0	30.6	25.0	31.6	16.7	30.5	27.9
41.0	30.4	33.0	20.0	39.3	10.0	34.0	50.0	22.6	5.6	29.1	21.1
12.9	17.3	13.9	10.0	7.1	0.0	4.2	0.0	5.1	0.0	17.6	21.5
33.4	26.1	22.4	30.0	32.2	10.0	26.4	12.5	30.4	16.7	29.4	16.4
22.3	34.7	19.1	20.0	33.8	40.0	24.3	37.5	23.5	11.1	24.1	23.0
18.0	4.3	7.5	0.0	9.3	10.0	9.7	12.5	6.4	0.0	13.9	12.2
26.9	17.4	24.4	20.0	31.2	10.0	20.1	25.0	27.8	22.2	25.3	13.8
19.8	21.7	18.1	0.0	21.8	0.0	24.3	25.0	13.2	0.0	18.3	13.4
16.2	13.0	16.0	10.0	15.3	10.0	9.7	12.5	11.1	5.6	15.4	14.9
15.8	8.7	8.5	0.0	9.8	0.0	6.9	0.0	6.0	0.0	11.8	10.4
23.0	13.0	11.7	20.0	19.1	0.0	14.6	0.0	18.3	11.1	19.0	12.3
23.8	13.0	17.1	20.0	19.6	0.0	18.8	0.0	17.5	11.1	19.1	10.3
15.1	4.3	8.5	10.0	14.2	20.0	11.8	12.5	11.6	11.1	13.5	13.4
10.1	0.0	11.7	0.0	7.6	0.0	12.5	0.0	14.1	0.0	11.7	8.1

TABLE 15. Percentages of leaders indicating sufficiency of, oversupply, or neither having nor needing professionals in the thirty-three professional/ occupational categories by community size and by sex, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community Population									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	M	F	M	F	M	F	M	F	M	F
Physicians	13.2	8.4	14.4	4.8	11.1	16.1	18.5	16.0	14.9	10.8
Dentists	23.3	22.9	24.3	11.9	25.9	35.5	26.9	36.0	29.3	27.0
Nurses	36.1	25.0	32.7	28.5	30.6	54.9	33.3	44.0	31.2	37.8
Optometrists	38.0	25.0	35.6	9.6	34.9	45.2	40.9	44.0	46.3	43.3
Veterinarians	40.2	29.2	35.9	26.2	33.8	45.1	32.1	40.0	40.5	46.0
Home Applnc. Rprmn.	35.5	27.1	31.4	21.4	31.3	41.9	31.7	32.0	34.7	40.5
QP Law Enfrcmnt.	35.0	33.4	34.2	35.7	36.6	50.0	40.6	40.0	42.2	35.1
Health Technicians	38.6	31.3	36.6	31.0	39.6	61.3	39.0	52.0	35.3	45.9
Plumbers	35.4	35.4	35.7	19.0	39.7	38.7	41.0	36.0	36.3	48.7
Surveyors	53.4	37.6	52.4	45.3	43.4	67.7	42.6	48.0	51.0	51.4
Recreational Wrkrs.	42.3	31.2	48.9	35.8	41.7	42.0	43.0	52.0	49.3	54.1
Auto Mechanics	50.7	39.6	52.2	52.4	54.0	61.3	52.2	60.0	57.3	54.1
Pharmacists	56.1	31.2	53.2	45.3	60.4	61.3	66.3	76.0	73.9	67.6
Architects	65.1	45.9	68.3	54.8	64.6	77.4	61.9	52.0	59.9	54.1
Ag. Eqpmnt. Rprmn.	44.4	37.5	49.7	45.2	50.9	64.5	44.2	60.0	53.2	56.8
Computer Spclsts.	68.3	43.7	72.2	61.9	73.0	80.6	71.1	64.0	68.6	64.9
Engineer	66.7	40.0	68.0	52.5	64.0	71.0	64.7	60.0	62.2	59.5
Accountants	56.6	41.6	57.8	54.8	59.8	61.3	56.7	60.0	62.8	62.2
P.R. Workers	60.9	41.7	67.2	47.7	60.3	77.4	60.7	64.0	62.8	59.5
Vocational Cnslrs.	58.3	33.3	64.1	42.9	55.0	71.0	59.5	64.0	61.7	62.2
Draftsmen	64.0	45.9	66.5	47.6	66.7	80.7	59.9	60.0	61.9	67.6
Lawyers	61.4	50.1	67.9	54.8	69.9	58.0	64.7	68.0	76.4	64.9
QP Adult Ed. Tchrs.	52.9	45.9	63.3	52.4	56.6	80.6	65.1	68.0	59.0	73.0
Social Workers	66.6	47.9	70.8	64.2	70.9	77.5	61.5	68.0	71.1	62.2
Embalmers	70.4	50.1	73.5	59.5	77.8	83.8	74.3	72.0	79.9	81.1
QP Pre KG & KG Tchrs.	58.8	50.0	65.1	69.0	66.2	90.3	69.5	76.0	69.4	75.7
Foresters	68.7	52.1	72.2	54.8	70.9	80.7	69.9	68.0	73.6	81.1
Newspaper Rprtrs.	70.9	52.1	75.3	54.8	73.5	71.0	74.4	76.0	79.8	75.7
Radio & TV Anncrs.	70.9	52.1	80.7	57.2	76.2	83.9	78.8	80.0	78.8	83.8
QP Jr&Sr H.S. Tchrs.	61.4	43.7	69.8	71.5	71.4	90.3	74.8	68.0	74.7	75.7
QP Elmntry Schol Tchrs.	63.5	45.9	73.9	73.8	71.9	90.3	75.6	72.0	74.7	78.4
Librarians	74.0	56.3	80.6	66.7	77.8	83.9	78.0	72.0	77.7	83.8
Clergymen	72.0	56.3	82.1	83.4	84.2	90.4	77.6	72.0	83.2	81.1

QP = Qualified people for

TABLE 15. Continued

Community Population											
5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 or over		All	
M	F	M	F	M	F	M	F	M	F	M	F
12.6	0.0	20.2	10.0	23.0	40.0	27.8	37.5	23.0	38.9	16.9	13.0
39.2	34.8	34.1	30.0	39.8	80.0	50.0	75.0	44.0	38.9	32.6	30.6
25.9	34.8	29.8	10.0	21.8	50.0	28.5	37.5	17.9	27.8	28.8	35.3
49.3	43.5	61.7	40.0	66.0	90.0	66.7	87.5	63.7	33.3	48.2	36.8
43.2	60.9	39.4	60.0	46.4	70.0	49.3	25.0	55.1	50.0	41.3	41.4
30.6	30.4	38.3	20.0	36.0	50.0	43.8	50.0	44.9	44.4	35.0	33.0
37.4	13.0	42.6	40.0	44.8	50.0	36.8	37.5	36.8	50.0	38.3	37.6
29.4	30.4	36.2	40.0	32.8	60.0	32.0	37.5	30.3	22.2	34.8	40.3
43.2	30.4	51.1	40.0	62.3	80.0	59.8	62.5	61.1	61.1	44.7	38.7
42.4	47.9	44.7	30.0	41.5	80.0	45.8	37.5	66.2	88.9	48.8	50.7
55.0	47.9	70.2	80.0	67.2	80.0	61.9	62.5	70.1	77.8	53.4	48.2
46.1	69.7	45.8	50.0	52.4	80.0	52.1	37.5	50.5	44.4	51.7	53.2
71.3	60.9	71.3	90.0	76.5	100.	74.9	62.5	67.5	61.1	66.8	58.3
54.7	65.2	55.4	50.0	71.6	80.0	73.0	62.5	86.8	88.9	65.9	60.2
50.7	47.8	59.6	60.0	55.8	80.0	57.0	12.5	59.0	83.3	51.8	52.4
57.2	43.6	55.0	50.0	46.0	80.0	50.8	62.5	56.0	55.6	63.2	59.8
55.0	47.8	50.0	70.0	56.3	60.0	61.8	37.5	74.4	83.4	63.0	58.6
64.1	56.6	66.0	80.0	75.4	80.0	79.2	62.5	76.1	72.2	64.2	58.6
63.0	65.2	72.3	80.0	65.7	70.0	63.9	62.5	77.8	88.9	64.9	60.9
57.2	52.2	59.6	60.0	56.8	80.0	60.4	62.5	58.1	83.3	59.1	56.0
49.3	47.9	58.5	70.0	56.3	90.0	58.4	37.5	70.1	94.5	61.5	61.3
80.6	74.0	80.8	90.0	91.3	100.	90.9	87.5	91.1	100.	76.5	67.0
52.6	47.8	68.0	60.0	62.3	90.0	66.0	75.0	62.3	66.7	60.0	62.9
70.5	43.6	76.6	80.0	64.0	60.0	70.8	50.0	69.2	88.9	68.6	63.2
75.2	82.7	86.1	100.	86.9	90.0	82.0	75.0	80.4	88.9	77.7	72.9
61.2	56.5	68.2	70.0	63.9	90.0	70.9	62.5	65.8	72.2	65.9	69.7
66.9	60.9	67.0	90.0	70.5	100.	64.6	62.5	65.9	83.4	69.3	69.0
76.2	74.0	78.7	90.0	79.8	90.0	84.0	75.0	81.6	94.4	77.0	69.8
75.2	69.6	86.2	100.	85.3	100.	84.8	87.5	83.3	100.	79.1	74.3
66.9	60.9	79.8	70.0	75.4	100.	79.1	87.5	75.7	88.9	72.0	70.8
65.8	60.9	74.4	70.0	74.4	100.	74.9	87.5	76.5	77.8	72.3	71.7
78.1	78.3	85.1	90.0	80.9	80.0	82.6	75.0	78.1	83.4	78.4	74.3
84.9	87.0	83.0	100.	89.1	100.	82.6	87.5	78.2	88.9	81.2	79.6

leaders in their communities leads to some interesting relationships. In the case of physicians, female leaders in towns of less than 500 reported a serious shortage at 83.4 percent while 8.4 percent reported a sufficiency. In cities of 50,000 or more, the ratio between serious shortage and sufficiency was approximately 6 to 4. The leaders in the smaller communities have a much more acutely perceived vision of shortages than those in the larger communities. This fact illustrates the continuing problem of rural residency for professionals.

Outside of health professions, the female leaders tended to respond consistently with males in their perception of shortages and sufficiencies. The ten most serious shortages perceived by females in rank order were: physicians, dentists, home appliance repairmen, qualified people for law enforcement, plumbers, nurses, optometrists, veterinarians, health technicians, and recreation workers. The male leaders perceived this group in the following order: physicians, nurses, dentists, home appliance repairmen, qualified people for law enforcement, health technicians, veterinarians, plumbers, optometrists and surveyors.

In view of the increasing crime rates against people and property throughout North Carolina, it is of interest to see how sex differences affected perceived shortages of qualified people of law enforcement. More female leaders in communities of less than 500 reported a perceived shortage (62.5%) than males in the same size community (57.1%). In larger communities, those with over 50,000 inhabitants, the response reversed with more males reporting a shortage (59.0%) than females (50.0%).

Since the sample is predominantly in the 45 to 65 age bracket, an analysis of the perceived need for social workers may be interesting

from the standpoint of caring for the aged, the plethora of government social programs and the shifting social problems found in communities among the youth. The response of the female leaders was very wide in range. In communities of 1,000 to 1,499, 6.4 percent of the leaders indicated a shortage of social workers while for cities with 15,000 to 24,999 residents the figure was 40.0 percent. The range for the male counterparts in the same size communities was from 20.6 percent to 33.0 percent. On the other hand, the range for those who reported a sufficiency of this professional category ran from a low of 43.6 percent to a high of 89.9 percent. For males the comparable range was from 61.5 percent to 76.6 percent. The variation in range between the responses of males and females in this professional category illustrates a similar awareness of the needs for social workers by the female leaders, with perhaps the differences attributable to the social function found at each level of community size.

Although the female leaders represent a much smaller percentage of the sample, their perception of serious shortages of professionals is in proportion to and is consistent with the male leaders. This illustrates an accurate perspective of real community needs on behalf of both male and female leaders.

In the case of elected versus nonelected leaders, the trend found in the male-female dichotomy seems to hold, i.e., a comparison of the two dichotomies indicates both maintain that serious shortages are percentagewise greater in the smaller communities with a decline in percentage as the community size increases. There are exceptions to the trend but the situation does hold true for the top ten ranked

professional categories. In the case of sufficiency of professionals, the leaders have indicated a percentage relationship which is inverse to that noted above. The smaller percentage is found in the smaller communities and it increases as the community size increases. Overall, the most serious shortages and most frequently cited categories remain constant for these two categories of leaders.

Since qualified people for law enforcement was a category cited in the top ten by the leaders, a review of the percentage spread by elected-nonelected leaders in selected community sizes was undertaken. In the less than 500 size, the range indicating a serious shortage was 58.6 percent for elected, to 56.3 percent for the nonelected. In the community size 10,000 to 14,999, the spread shows a 13 point increase, from 53.6 percent for the nonelected leaders to 40.0 for the elected leaders. The nonelected leaders in this instance being generally businessmen in urban locations may be indicating their concern with increasing crime, vandalism, the lack of adequate police protection and the community's inability to cope with the problem. In communities of 50,000 or more, the percentage relationship reverses itself with elected leaders reporting 71.4 percent vis a vis 54.3 percent for the nonelected leaders. One interpretation of these percentages could indicate the relative concern of both type leaders to their responsibility to protect and keep secure the community and its people.

Interestingly, leaders, whether they were male or female or elected-nonelected, saw the clergy in relatively the same way -- sufficiently available.

TABLE 16. Percentages of leaders holding elected office and leaders not holding elected office indicating shortage (serious+minor) in the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	Community population									
	Less than 500		500 to 999		1,000 to 1,499		1,500 to 2,499		2,500 to 4,999	
	E	NE	E	NE	E	NE	E	NE	E	NE
Physicians	84.1	77.4	84.8	85.8	83.9	86.2	76.8	82.3	82.0	85.9
Dentists	66.8	73.2	69.5	76.1	72.6	63.8	68.4	69.5	65.0	71.4
Nurses	54.4	53.5	61.4	59.3	59.0	59.6	55.5	60.2	62.5	63.4
Optometrists	47.4	60.5	54.8	68.1	56.4	55.3	47.7	48.3	46.5	52.2
Veterinarians	43.8	56.3	56.2	63.8	51.6	60.7	57.4	60.2	52.5	54.2
Home Applnc. Rprsn.	58.6	56.3	62.9	59.3	55.7	57.4	56.8	50.8	55.0	56.8
Health Technicians	47.4	50.7	56.1	54.0	41.9	51.0	44.5	55.1	53.5	55.9
Plumbers	54.5	53.6	62.8	58.4	57.3	53.2	55.5	57.7	66.0	54.8
Surveyors	34.3	42.2	41.9	38.1	47.5	41.5	47.7	49.1	46.5	41.2
Recreational wrkers.	41.5	47.9	44.3	39.0	44.3	53.1	52.2	34.8	42.5	43.7
Auto mechanics	36.1	40.9	42.4	39.9	25.8	36.2	42.6	38.1	42.5	34.7
Pharmacists	32.6	43.7	40.5	41.6	37.1	29.8	27.8	27.1	21.5	21.6
Architects	19.5	26.8	24.8	25.7	24.2	24.4	26.5	26.3	27.5	35.2
Ag. Eqpmnt. Rprsn.	42.0	46.4	43.3	39.8	44.4	35.1	47.7	37.3	37.0	40.2
Computer Specialists	13.6	25.3	19.5	16.0	15.3	12.8	14.2	17.0	22.0	24.7
Engineers	15.4	30.9	24.3	28.3	25.0	23.4	23.2	26.3	24.0	37.1
Accountants	29.0	39.4	33.8	37.1	36.3	27.6	37.4	26.2	35.5	28.6
P.R. Workers	25.4	33.8	23.8	27.4	20.2	28.7	29.1	27.1	25.0	32.6
Vocational Cnslrs.	28.4	42.3	25.2	34.5	25.9	26.6	29.7	25.4	26.5	32.7
Draftsmen	19.6	29.6	22.4	28.3	21.0	18.1	24.5	33.0	27.5	31.6
Lawyers	24.2	28.1	24.8	28.3	30.7	22.3	34.9	20.4	19.0	20.1
QP Adult Ed. Tchrs.	28.4	36.6	23.3	29.2	29.0	24.5	23.2	24.5	25.5	32.1
Social Workers	22.4	25.4	21.0	21.3	18.6	18.1	32.3	23.7	19.0	26.6
Embalmers	15.4	22.6	18.1	20.4	13.0	12.8	12.3	19.5	16.5	13.0
QP PreKG&KG Tchrs.	27.9	29.6	24.8	23.9	16.9	21.3	20.7	20.3	23.5	23.6
Foresters	14.8	26.8	17.2	12.1	13.7	17.1	18.1	15.3	12.0	20.1
Newspaper Rprtrs.	17.8	22.6	16.6	18.6	16.2	14.9	16.8	16.9	14.5	16.1
Radio & TV Annors.	16.0	22.6	11.4	12.4	10.4	9.6	10.4	11.8	15.0	12.0
QP Jr&Sr H.S. Tchrs.	22.5	36.6	15.3	23.0	12.9	20.2	14.2	16.1	15.0	21.6
QP Elmntry Tchrs.	20.1	33.0	14.7	18.5	15.3	18.1	12.9	17.8	14.5	20.1
Librarians	11.2	18.4	10.5	18.6	11.3	12.7	19.4	11.0	13.0	16.1
Clergymen	14.2	25.4	9.5	8.0	8.1	10.6	12.2	13.6	11.0	11.0

QP = Qualified people for

TABLE 16. Continued

Community population											
5,000 to 9,999		10,000 to 14,999		15,000 to 24,999		25,000 to 49,999		50,000 or over		All	
E	NE	E	NE	E	NE	E	NE	E	NE	E	NE
84.8	86.3	84.0	76.1	65.4	77.5	71.0	67.0	74.3	70.0	81.5	79.4
56.0	56.0	72.0	62.4	50.0	57.7	38.4	47.9	61.5	46.3	65.1	61.3
68.0	67.5	88.0	60.0	73.1	73.3	63.2	66.1	87.1	69.4	63.0	64.4
43.2	48.0	40.0	35.0	21.1	31.6	28.9	28.7	45.8	26.4	47.2	44.2
48.0	49.2	52.0	54.9	59.6	47.2	36.8	46.1	47.1	33.3	51.3	50.8
69.6	60.5	64.0	55.1	63.5	60.6	57.9	48.7	54.3	46.8	62.9	57.2
63.2	58.3	40.0	53.6	51.9	55.6	55.3	60.1	71.4	54.3	58.7	56.3
55.2	63.5	72.0	52.5	61.6	60.6	50.1	62.6	74.3	58.7	53.0	56.9
59.2	50.3	48.0	40.1	48.1	31.7	50.0	30.5	45.7	29.6	57.6	45.4
49.6	50.8	56.0	51.2	57.8	53.6	58.0	50.4	31.4	23.1	44.6	43.0
33.6	37.2	36.0	18.8	32.7	21.8	26.3	29.6	31.5	17.7	41.3	33.4
49.6	43.6	56.0	42.6	46.2	40.8	50.0	41.7	44.2	45.1	43.1	40.5
23.2	22.3	20.0	25.0	21.2	19.7	18.4	22.6	41.4	21.0	30.0	25.6
37.6	36.6	24.0	42.5	30.7	24.6	21.1	23.5	11.4	5.9	25.4	26.2
45.6	34.9	36.0	26.3	28.9	35.2	36.8	33.9	15.7	17.8	40.2	33.6
28.0	31.5	28.0	36.3	34.6	44.4	31.6	38.2	31.5	32.8	20.8	28.4
37.6	36.6	32.0	41.3	38.4	39.4	23.7	34.8	17.2	18.8	24.6	31.2
32.8	28.0	20.0	30.0	25.0	19.7	13.1	16.5	20.0	19.9	31.8	26.3
23.2	28.6	36.0	12.5	21.1	28.8	31.5	27.8	20.0	12.9	24.9	25.7
30.4	32.0	48.0	22.6	30.8	37.3	47.4	26.1	38.6	28.5	29.5	30.7
39.2	40.0	24.0	33.8	34.6	40.8	42.1	33.9	22.8	20.5	25.8	30.7
14.4	12.6	28.0	8.8	7.7	7.7	2.6	4.3	8.5	3.2	22.2	14.3
28.0	36.5	32.0	20.1	19.2	34.5	13.2	31.3	32.9	27.4	25.6	30.0
19.2	25.2	32.0	15.1	36.5	33.1	21.0	27.8	25.7	21.5	23.1	24.3
16.0	17.1	4.0	7.6	13.5	7.7	2.6	12.1	8.6	5.4	14.2	13.1
20.0	30.9	32.0	22.5	23.0	31.0	26.3	19.1	32.8	25.8	23.3	25.0
17.6	21.7	12.0	17.6	25.0	19.0	21.2	24.3	20.0	9.7	16.3	18.7
14.4	17.2	16.0	15.1	15.4	15.5	10.5	9.6	20.0	7.0	16.0	14.7
14.6	15.4	12.0	6.3	11.5	9.1	7.9	6.1	12.8	2.7	12.4	10.4
20.0	23.4	8.0	13.8	13.5	18.3	13.1	14.7	18.6	17.2	16.1	20.2
20.0	24.6	24.0	16.3	15.4	19.7	13.1	19.1	20.0	16.1	16.2	20.1
16.8	12.0	8.0	8.8	15.4	14.1	15.8	11.3	15.7	10.2	13.5	13.3
12.8	6.8	24.0	6.3	5.8	7.7	7.9	13.0	20.0	10.2	12.1	10.6

TABLE 17. Percentage of leaders holding elected office and leaders not holding elected office indicating sufficiency of, oversupply, or neither having nor needing professionals in the thirty-three professional/occupational categories by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	COMMUNITY POPULATION									
	Less than 500		500-900		1000-1499		1500-2499		2500-4999	
	E	NE	E	NE	E	NE	E	NE	E	NE
Physicians	11.8	14.1	13.3	12.4	12.9	10.6	19.3	16.9	15.5	13.1
Dentists	26.1	18.3	25.3	17.7	24.2	30.9	27.1	28.8	33.5	25.1
Nurses	33.2	33.8	32.9	33.6	36.2	33.0	24.8	33.9	32.0	32.1
Optometrists	41.4	25.4	37.6	22.2	35.5	36.2	40.0	44.9	49.5	41.8
Veterinarians	43.2	26.8	37.6	30.9	41.1	29.7	31.0	36.4	42.5	39.8
Home Appl. Rprmn.	37.3	29.6	29.0	30.9	30.6	36.2	28.3	37.3	33.5	36.2
QP Law Enfrcmnt.	34.9	35.2	33.8	35.4	39.5	39.4	34.8	45.8	42.5	39.7
Health Technicians	37.8	35.2	37.2	36.3	47.6	37.3	44.5	35.5	36.0	35.6
Plumbers	36.0	35.1	32.4	36.3	37.9	40.4	38.7	42.3	33.0	41.7
Surveyors	53.9	43.7	51.0	54.8	46.9	47.9	41.3	44.1	48.5	53.3
Recreation wrkers.	44.9	33.8	47.6	47.7	47.6	36.3	36.2	54.2	50.5	49.3
Auto Mechanics	50.3	46.4	51.4	53.9	52.5	58.5	49.7	56.0	54.5	60.3
Pharmacists	55.0	42.2	53.3	51.3	58.1	62.8	65.7	67.8	73.5	71.9
Architects	65.7	56.3	68.1	66.3	68.5	65.0	58.7	64.4	62.0	55.8
Ag. Eqpment. Rprmn.	46.2	38.1	49.0	51.4	50.0	57.5	42.6	50.8	54.5	53.3
Computer Spclsts.	68.1	57.8	72.4	70.7	75.0	73.4	71.6	70.3	68.0	67.3
Engineer	68.0	56.4	69.0	62.9	66.1	64.9	63.9	65.2	69.0	54.4
Accountants	58.0	43.7	60.0	56.7	58.9	61.8	51.6	65.3	60.5	64.9
PR Wrkers.	61.0	50.7	67.2	63.8	66.1	59.6	56.7	64.4	64.5	59.9
Vocational Cnslrs.	58.0	45.0	65.8	54.0	58.0	58.5	55.5	65.3	62.5	60.8
Draftsmen	63.2	53.5	68.1	58.4	69.3	68.1	60.7	58.5	64.0	60.4
Lawyers	61.6	57.8	69.5	62.9	65.3	70.3	57.4	72.8	77.0	74.9
QP Adult Ed. Tchrs.	55.6	46.5	65.7	55.8	58.9	62.7	65.2	64.5	64.0	56.3
Social Workers	65.8	60.5	71.9	69.8	73.3	70.2	57.4	67.8	74.0	65.4
Embalmers	69.8	60.5	74.3	69.0	78.1	79.8	76.1	70.3	78.5	81.0
QP Pre-KG&KG Tchrs.	58.5	53.3	67.1	63.7	72.6	67.0	69.6	69.5	69.5	70.4
Foresters	68.6	60.5	74.2	65.5	74.2	71.2	69.0	70.3	77.5	69.8
Newspaper Rprtrs.	70.4	61.9	74.8	70.8	74.1	72.3	73.5	75.5	79.5	78.4
Radio & TV Anncrs.	69.8	63.3	80.0	75.2	77.5	77.6	77.3	79.7	78.0	80.5
QP Jr&Sr H.S. Tchrs.	62.1	49.3	72.8	66.4	78.2	69.2	74.8	71.2	78.5	79.9
QP Elmntry. Tchrs.	65.1	49.2	76.3	70.9	76.6	72.3	76.8	72.0	77.5	72.9
Librarians	73.4	67.5	82.4	74.3	81.4	74.5	71.6	83.9	81.0	75.9
Clergymen	73.4	61.9	83.4	84.0	86.3	83.0	74.9	78.8	83.5	81.5

QP = Qualified People for

TABLE 17. Continued

COMMUNITY POPULATION											
5000-9999		10,000-14,999		15,000-24,999		25,000 49,999		50,000 and over		ALL	
E	NE	E	NE	E	NE	E	NE	E	NE	E	NE
10.4	12.0	16.0	20.1	32.7	21.8	29.0	28.7	24.3	24.1	15.6	17.5
36.0	41.1	28.0	35.1	46.2	41.6	60.6	47.8	32.8	47.8	30.2	34.6
24.8	27.4	12.0	32.5	15.4	25.3	34.2	28.7	8.6	22.0	29.7	29.4
49.6	49.7	60.0	60.0	77.0	65.6	71.1	63.5	48.5	66.1	45.3	49.3
44.0	46.2	44.0	41.3	40.4	52.1	57.9	46.1	47.2	57.6	40.8	42.8
24.8	34.9	32.0	38.6	34.6	37.3	39.5	46.1	38.6	45.7	31.5	37.7
31.2	38.8	52.0	40.1	48.1	44.4	42.1	35.6	28.6	39.8	36.6	39.4
31.2	27.9	24.0	40.0	30.7	35.9	39.4	29.6	21.4	32.2	36.6	34.4
37.6	46.8	40.0	52.4	48.1	68.3	47.4	64.3	45.7	65.0	37.1	50.3
42.4	44.1	40.0	45.0	38.4	46.4	39.4	47.0	62.9	70.4	47.7	51.0
56.8	54.2	60.0	74.9	55.8	73.3	71.1	59.1	62.8	73.7	49.4	57.0
40.8	53.7	40.0	48.6	50.0	57.1	47.4	52.2	51.5	49.0	49.9	54.0
69.6	73.1	80.0	71.2	75.0	78.9	81.6	72.2	54.3	71.5	63.5	68.3
52.8	58.3	64.0	51.2	65.5	74.7	76.3	71.3	87.2	86.6	64.8	66.3
45.6	56.0	60.0	59.9	61.5	56.3	55.3	53.9	64.3	59.1	50.0	54.6
55.2	57.6	64.0	52.4	50.0	47.9	55.2	50.5	54.2	55.4	66.4	60.4
54.4	56.0	56.0	51.2	50.1	58.5	73.7	56.5	77.1	74.2	65.6	60.8
60.8	66.9	72.0	66.2	71.2	79.6	84.3	77.4	75.7	74.7	60.9	67.2
64.8	64.0	60.0	77.5	65.4	67.7	60.6	64.4	74.3	80.1	63.7	66.1
57.6	57.1	48.0	63.6	57.7	59.9	44.7	64.3	57.1	60.2	58.8	59.3
49.6	50.3	68.0	57.4	57.7	57.8	50.0	58.3	68.6	73.0	62.9	60.4
76.0	84.5	64.0	87.4	90.4	91.6	97.6	88.7	91.5	92.0	71.2	80.0
56.0	50.9	64.0	68.6	73.1	63.4	78.9	60.9	61.4	63.5	62.5	59.4
69.6	69.7	64.0	81.1	61.6	65.5	73.7	67.0	70.0	71.0	68.5	68.4
74.4	78.9	92.0	86.1	82.7	89.5	86.9	80.1	81.4	80.6	76.5	69.0
65.6	58.8	64.0	68.7	67.4	67.6	65.8	71.3	64.3	66.7	66.9	66.1
66.4	67.4	72.0	68.6	57.7	78.9	65.6	65.3	65.7	67.7	70.6	78.5
76.0	77.7	80.0	79.9	75.0	82.4	84.2	83.4	77.1	84.9	75.3	77.8
72.8	78.3	84.0	88.7	78.9	88.8	84.2	86.1	78.6	87.1	77.0	81.1
68.8	66.9	88.0	76.2	76.9	79.6	81.6	78.3	80.0	75.3	73.8	70.9
68.0	65.7	72.0	73.7	73.1	79.6	79.0	74.8	75.7	76.9	73.9	71.7
74.4	82.3	84.0	86.2	80.8	82.4	84.2	81.7	75.7	79.6	77.9	78.9
80.0	90.3	72.0	88.7	90.4	90.9	92.1	80.0	72.9	81.7	79.9	82.8

One question of concern was whether or not the various categories of leaders, i.e., male and female, elected and nonelected, were systematically overreporting the seriousness of the shortage. A comparison of Tables 14 through 17 leaves the impression that this was not the case. There are certain percentages which are larger by far then others in certain community sizes but there is no outstanding inconsistency in the reporting. This leads to a conclusion that the reporting was done from a leadership viewpoint and does not reflect, on balance, a bias or prejudicial consideration, i.e., a leader is a leader and as such reported responsibly on community needs. Another consistent relationship indicated in the percentages reported in Tables 14 through 17 is rural-urban dichotomy of professional needs. The value and importance placed upon professional shortages by the respondents who are professionally associated with the needs of the area and size of the community is seen in the larger percentages of perceived shortages recorded in the smaller communities for agricultural equipment repairmen, vice versa, the larger percentages recorded for computer specialists in the 50,000 or more community size.

Responses to Open-ended Question

In spite of having included a comprehensive list of professional categories, an attempt was made to insure that the list had not seriously biased the judgement of the leaders. Consequently, an open-ended question was added where the leaders were asked to write in three professional categories in which they saw the most serious shortages in their own communities. Further, they were asked to indicate if

in their own communities. An analysis of the frequencies with which the professional categories were cited by community size are shown in Table 18.

Table 18 shows the percentage distribution of the citations by the respondents according to the size of their community. In all, 6,288 citations were made by the 2,599 respondents. Each leader, therefore, cited on an average 2.4 professional/occupational categories in which he considered shortages to be the most serious. The eleven most frequently cited professional/occupational categories in which the leaders thought the shortages to be the most serious were: physicians (25.7%), dentists (11.0%), qualified people for law enforcement (10.1%), nurses (8.7%), veterinarians (4.3%), home appliance repairmen (4.1%), plumbers (3.6%), recreation workers (3.2%) health technicians (3.1%), auto mechanics (2.9%), and optometrists (2.6%). Comparison of these data with those presented in Table 8 shows that the top eleven categories were exactly the same when the information was sought using a structured (rather than open-ended) instrument. This comparison stresses the reliability and validity of the information provided by the leaders. Generally speaking, the data in Table 18 show the same relationships between perceived shortages and community size as the data discussed in Table 18.

TABLE 18. Percentage distribution of the citations made in the list of three most serious shortages by community size, Survey of Professionals' Availability, North Carolina, 1975.

Occupational Categories	ALL	%	Less than 500	500 to 999	1,000 to 1,499	1,500 to 2,499	2,500 to 4,999	5,000 to 9,999	10,000 to 14,999	15,000 to 24,999	25,500 to 49,999	50,000 or over	NO RESPONSE
NUMBER OF CITATIONS	6288		578	827	529	676	1016	749	255	516	376	576	190
NUMBER OF LEADERS	2599		245	332	222	281	406	307	105	202	155	258	86
AVERAGE CITS/LEADERS	2.4		2.3	2.4	2.3	2.4	2.5	2.4	2.4	2.5	2.4	2.2	2.2
Physicians	1619	25.7	26.9	27.8	28.5	26.6	28.4	26.7	27.0	18.0	22.3	21.1	23.6
Dentists	693	11.0	9.8	15.1	15.3	14.2	11.6	8.9	12.5	7.1	5.0	7.8	8.4
OP Law Enfrcmnt.	641	10.1	14.8	10.5	9.2	9.0	9.6	8.5	6.2	10.0	9.8	12.3	10.5
Nurses	549	8.7	5.5	5.0	3.0	6.8	7.8	10.5	11.7	12.2	12.7	16.8	8.4
Veterinarians	275	4.3	3.2	5.1	4.3	3.8	5.1	4.1	4.3	5.4	3.4	3.6	4.2
Home Applnc. Rprmn.	263	4.1	3.9	4.4	3.5	5.0	4.5	3.4	4.3	4.6	3.4	3.6	4.7
Plumbers	227	3.6	3.8	3.8	4.3	3.4	5.9	4.4	1.9	2.1	1.5	0.6	4.2
Recreation wrkers.	201	3.2	5.1	3.1	5.6	3.9	3.7	2.4	1.1	1.3	3.1	1.2	1.5
Health technicians	200	3.1	1.9	1.6	3.0	2.2	2.0	2.6	5.0	4.8	5.3	6.9	3.1
Auto mechanics	185	2.9	1.5	2.1	3.0	3.2	2.4	2.6	5.4	2.9	5.0	2.9	5.2
Optometrists	167	2.6	2.5	4.2	2.8	4.2	2.4	2.2	1.5	1.3	2.6	1.2	1.5
Surveyors	165	2.6	1.3	1.9	2.4	2.9	2.1	3.2	3.1	6.3	1.8	1.9	1.5
Social wrkers.	108	1.7	1.7	0.9	1.7	1.6	1.3	1.7	1.9	2.5	2.3	2.2	1.5
Pharmacists	99	1.5	4.1	3.1	3.0	0.7	0.9	1.3	0.0	0.0	1.0	0.1	1.5
Ag. Eqpmnt. Rprmn.	82	1.3	2.5	2.1	1.5	0.7	1.0	1.0	0.7	0.9	0.7	0.5	2.1
Qualified tchrs.	72	1.1	1.3	0.2	0.0	1.0	0.9	1.6	0.3	1.3	2.6	1.9	2.1
Engineers	65	1.0	0.3	0.6	0.0	0.2	0.4	1.8	2.3	3.2	1.0	1.3	1.0
Lawyers	63	1.0	0.3	1.4	1.3	2.0	1.5	0.8	0.7	0.3	0.0	0.0	1.0
ALL OTHERS	614	10.6	9.6	7.1	7.6	8.6	8.5	12.3	10.1	15.8	16.5	14.1	14.0
TOTAL	6288	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Interpretative Techniques Applied to the Sample Date: Factor Analysis

In an effort to understand more clearly the responses of the leaders vis-a-vis the shortages of professionals and to see if there were any patterns of interrelationships of the data, a factor analysis procedure was conducted on the data. This evaluation was accomplished through the Statistical Package for Social Sciences program.

The single most distinctive characteristic of factor analysis is its data reduction capability. Given an array of correlation coefficients for a set of variables, factor analytic techniques can develop underlying patterns of relationships which when reduced to a smaller set of factors may be taken as source variables accounting for the observed interrelationships in the data.

Initially, using the principal axis technique, factoring without iteration and, then, factoring with iteration was conducted. This program does correlations for factoring. In this instance, a correlation between variables was computed. The thirty-three professional categories were used as variables. The succeeding step, extraction of initial factors, developed a set of defined factors in a principal axis solution. This process in factor analysis allows one to explore data reduction possibilities by constructing a set of new variables on the basis of the interrelationships exhibited as exact mathematical transformations of the original data, or inferential assumptions may be made about the structuring of the variables and their source of variation. The concluding major option available was whether to choose an orthogonal rotational method or an oblique one. The basic impetus for

TABLE 19. Principal Factor Areas-Oblique Rotational Factor Structure, Survey of Professionals' Availability, North Carolina, 1975.

Variable	Factor 1 Human Service	Factor 2 Educational	Factor 3 Medical	Factor 4 Maintenance Service	Factor 5 Paramedical	Factor 6 Technical Professional
Public Relations Officer	.712	.322	.271	.196	.261	.499
Vocational Guidance Directrs.	.671	.397	.286	.238	.337	.403
Newspaper Reporters	.670	.239	.228	.166	.217	.514
Embalmers	.601	.284	.385	.282	.276	.458
Social Workers	.578	.325	.289	.205	.338	.291
Librarians	.493	.205	.261	.187	.197	.462
Recreations Workers	.490	.313	.312	.245	.242	.183
Clergymen	.225	.229	.211	.211	.186	.101
Elementary Teachers	.297	.933	.208	.212	.232	.117
Jr. & Sr. H.S. Teachers	.349	.859	.230	.241	.237	.161
Pre-kindergarten Teachers	.341	.824	.198	.228	.256	.141
Adult Education Teachers	.378	.721	.227	.195	.273	.162
Dentists	.193	.178	.769	.331	.261	.085
Optometrists	.371	.217	.722	.283	.282	.252
Pharmacists	.291	.233	.601	.317	.346	.145
Physicians	.164	.207	.599	.319	.316	.022
Veterinarians	.387	.192	.549	.321	.375	.321
Lawyers	.371	.160	.460	.345	.088	.249
Home Appliance Rpr.	.202	.150	.284	.667	.174	.084
Plumber	.141	.136	.291	.569	.105	.039
Auto Mechanic	.084	.148	.203	.509	.175	.133
Agri-Equipment Rpr.	.241	.221	.310	.501	.174	.237
Law Enforcement Pers.	.131	.156	.164	.250	.198	.029
Health Technicians	.448	.263	.419	.262	.781	.360
Nurses	.310	.278	.410	.301	.780	.225
Engineers	.433	.171	.186	.158	.214	.817
Draftsmen	.523	.220	.217	.177	.282	.756
Computer Specialists	.364	.139	.094	.086	.167	.744
Architect	.437	.128	.264	.212	.182	.698
Radio & TV Announcers	.632	.224	.174	.106	.233	.644
Foresters	.441	.220	.279	.260	.237	.566
Surveyors	.460	.247	.356	.381	.296	.468
Accountants	.351	.136	.350	.373	.172	.376

employing any rotational method is the same: somehow to achieve simpler and theoretically more meaningful factor patterns. The oblique method is considered empirically more realistic. The oblique rotational method was selected in this analysis.

The most meaningful program was principal factoring with iteration: PA2, n-factors = 6, oblique/delta rotation - 0.0, selecting option 2 -- pairwise deletion of missing data -- with statistical options 2, 4, 5, 6, and 8. The statistical options gave a correlation matrix, communalities, eigenvalues, and proportion of total and common variance. Further, a plot of rotated factors and a factor matrix were received.

The oblique/delta rotational option with 6 factors at the 0.0 level produced a factor structure that grouped the thirty-three variables into six identifiable factor areas. This output also showed the highest correlation among factors. In the oblique factor matrix, factor 1 contained the highest loadings for variables: librarian, clergyman, social worker, embalmer, vocational guidance director, newspaper reporter and public relations officers. These professionals are seen as having a human services orientation. Factor 2 contained the highest loading for adult education teachers, pre-kindergarten, elementary and junior and senior high school teachers. The emphasis here is on education in the professional aspect. Factor 3 contained the highest loadings for professionally educated individuals in the medical field. It identified physicians, dentists, optometrists, pharmacists, veterinarians. Lawyers were also included in this category. Factor 4 identified maintenance/service oriented personnel. These included plumbers, qualified qualified people for law enforcement, agri-equipment repairmen, automotive mechanics, and home appliance repairmen. Factor 5 contained

the highest loadings for the paramedical professions. These included the professional categories of nurses and health technicians. Factor 6 addressed the technical professional categories of accountant, architect, computer specialist, engineer, forester, draftsman, surveyor, and radio and television announcer.

In summary, by factor analysis we were able to reduce the variables for thirty-three professions to six principal factor areas. These are specified as (1) human services, (2) educational, (3) medical, (4) maintenance/service, (5) paramedical and (6) technical professional. See Table 19 for the specific variables and their loadings in a factor matrix. It is anticipated that this classification will be useful in developing an empirical typology that will facilitate future hypothesis testing with regard to the dimensions of perceived shortages and professional location. Finally, factoring, it is believed, will be useful in the future to reduce complex relationships to a relatively simple linear expression. This may be helpful in defining and explaining the decisional calculus that professionals use in selecting areas for practice and residence.

Interpretative Techniques Applied to the Sample Data: Scalogram Analysis

In the course of data analysis, it was suggested that the survey data might help toward the construction of other indices. In general, indices are used to predict or gauge some underlying continuum which can be only partially measured by any single item or variable which is included in the index.

One of these techniques, scalogram, analysis, commonly termed Guttman scaling after its originator, has become widely used in many

TABLE 20. Scalogram Analysis, Survey of Professionals' Availability, North Carolina, 1975

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* * * * * * * * * GUTTMAN SCALE(SERIOUS ) USING ****
MEDIC                                          DIVISION POINT =   23.00
SERVE                                          DIVISION POINT =   14.00
TECH                                           DIVISION POINT =   19.00
EDUC                                           DIVISION POINT =    8.00
HUMSER                                         DIVISION POINT =   19.00
* * * * * * * * * * * RESP = 1 FOR VALUES EQUAL TO DIVISION POINT AND ABOVE  * * *

ITEM.. MEDIC     SERVE      TECH      HUMSER    EDUC

RESP..  0    1 I  0    1 I  0    1 I  0    1 I  0    1 I TOTAL
-----I-ERR-----I-ERR-----I-ERR-----I-ERR-----I-ERR-----I
S    I         I         I         I         I         I
E  5 I   0   55I   0   55I   0   55I   0   55I   0   55I    55
R    I------ERRI         I         I         I         I
I    I         I         I         I         I         I
O  4 I 117   48I  47  118I   0  165I   0  165I   1  164I   165
U    I         I------ERRI         I         I         I
S    I         I         I         I         I         I
   3 I 327    3I  311  19I  14  316I   4  326I   4  326I   330
     I         I         I------ERRI         I         I
     I         I         I         I         I         I
   2 I 107    1I  105   3I  83   25I  16   92I  13    I   108
     I         I         I         I------ERRI         I
     I         I         I         I         I         I
   1 I  72    0I   72   0I  68    4I  61   11I  15   57I    72
     I         I         I         I         I------ERRI
     I    I    I         I         I         I         I
   0 I  16    0I   16   0I  16    0I  16    0I  16    0I    16
     I---------I---------I---------I---------I---------I
SUMS   639  107   551 195  181  565   97  649   49  697    746
PCTS    86   14    74  26   24   76   13   87    7   93
ERRORS   0   52    47  22   14   29   20   11   33    0    228

  2599 CASES WERE PROCESSED
  1853 (OR 71.3 PCT) WERE MISSING

STATISTICS..

COEFFICIENT OF REPRODUCIBILITY = 0.9389
MINIMUM MARGINAL REPRODUCIBILITY = 0.8314
PERCENT IMPROVEMENT = 0.1075
COEFFICIENT OF SCALABILITY = 0.6375
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types of social science research, particularly in the area of attitude research. Guttman scale analysis is a means of analyzing the underlying operating characteristics of three or more items in order to determine if their interrelationships meet several special properties which define a Guttman scale. Guttman scales must first be unidimensional, that is, the component items must all measure movement towards or away from the same single underlying object. Second, Guttman scales must be cumulative, and it is this property which differentiates Guttman scales from almost all other types of scales and indexes. Operationally, a cumulative scale implies that the component items can be ordered by degree of difficulty and that respondents who reply positively to a difficult item will always respond positively to less difficult items and vice versa.

Using the results of the factor analysis procedure applied to the data, that is, the six general factor areas representing the thirty-three occupational variables, a scale index was developed. (See Table 20). Some analytical comments on the index are believed appropriate. Initially, it was determined that the categories of medical and paramedical were so close from a scale standpoint that they should be combined. This was done. In order to strengthen the data from the standpoint of having a positive response from each respondent to the shortage categories, the responses of "not applicable" and "no response" as a condition of availability were purged from the survey. This operation had a significant impact on the number of cases available for indexing. The survey produced 2,599 cases for processing. The purging process reduced this figure to 746 scalable

cases. This, in effect, reduced the total N factor by 71.3 percent. Using the remaining 28.7 percent of cases as scalable items, a coefficient of reproducibility .930 was achieved with a coefficient of scalability of .637. Table 20 shows the basic characteristics of a Guttman scale, i.e., unidimensionality and cumulativeness. It is conceivable, and not unrealistic, to believe that throughout North Carolina professionals in the medical area are the most difficult to find and in the shortest supply. Appropriately, the scale shows a declining degree of difficulty in the perceived availability of professionals in the service oriented area, technical professional, human service occupations and, lastly, in the education field. This indicates that teachers are perceived to be more available than social workers, who are in greater supply than architects, who are more plentiful than plumbers. Finally, as this technique as well as other analyses of the data have shown those in the medical profession are perceived to be in the shortest supply.

SUMMARY AND CONCLUSIONS

This research project has dealt with the availability of personnel in thirty-three professional/occupational categories in the 446 North Carolina communities.

Essentially, two alternative techniques to the definition of shortage were available. Data could be collected on the number of professionals in categories x, y, and z for every 1,000 or 10,000 inhabitants, and then by some arbitrary means decide which communities had shortages and which did not. This was rejected both on practical and logical grounds. Practically speaking, reliable data for some categories and any data for some others was simply not readily available and accessible. Logically, it would be equally difficult to put trust in an arbitrary measure that would, for example, say that x number of medical doctors per 1,000 population is sufficient and that communities having less than this had a shortage. It was decided, therefore, to seek the perceptions of shortages by category from community leaders, who in their leadership position could give us their evaluation of the local situation. Completed questionnaires were received from 2,599 leaders residing in 446 communities.

Seeking information from a variety of leaders located in 446 communities provided an opportunity to deal with communities of all sizes ranging from a population of less than 500 to large metropolitan areas like Raleigh, Charlotte, Greensboro, and Winston-Salem with over 100,000 population. About half the communities (51.0%) included in the study have a population under 1,500, one-fifth (19.1%) have between

1,500 and 4,999 people. Only three percent had a population exceeding 25,000 people. The distribution of the communities shows quite clearly that North Carolina has not yet lost its small-town character.

The leaders were asked to check one of the five responses indicating their perceptions of the availability of people in the thirty-three professional categories. When the proportions indicating serious shortage and minor shortage are combined to get an overall picture of perceived shortages, the data indicated that at least a majority of the leaders reported shortages in eight of the same categories. These categories are: physicians (80.4%), dentists (62.9%), nurses (63.4%), veterinarians (52.0%), home appliance reparimen (59.7%), health technicians (54.7%), plumbers (51.2%), and qualified people for law enforcement positions (57.1%).

Judging once again by a majority of respondents, there does not seem to be any problems with the supply of professionals in twenty-three categories. For example, while 73.4 percent of the leaders believed they had a sufficient number of clergymen in their communities, there were in addition 5.9 percent who believed they were in oversupply and 1.6 percent claiming that they did not have any clergymen nor did they need any. Thus 80.9 percent of the leaders responded that there was no problem as far as the supply of clergymen is concerned. Comparable proportions for other categories are: radio and television announcers - 80.6 percent, librarians - 77.9 percent, embalmers - 77.0 percent, newspaper reporters - 76.2 percent, lawyers - 75.4 percent, elementary school teachers - 72.3 percent, junior and senior high school teachers - 71.9 percent, foresters - 69.3 percent, social workers - 68.1 percent,

pre-kindergarten and kindergarten teachers - 66.2 percent, pharmacists - 65.8 percent, architects - 65.2 percent, public relations workers - 64.5 percent, accountants - 63.6 percent, engineers - 62.7 percent, computer specialists - 62.7 percent, draftsmen - 61.3 percent, vocational counselors - 58.6 percent, recreational workers - 53.1 percent, adult education teachers - 52.2 percent, agricultural equipment repairmen - 51.8 percent and auto mechanics - 51.7 percent.

Analysis was made to find out the relation between the degree of shortages and community size. The data confirmed rather dramatically what had been suspected that in the professional/occupational categories where shortages were indicated, the shortages were especially critical in small communities.

The situation with regard to the other professional/occupational categories in which majority of respondents did not indicate shortages also varied with community size. Four different patterns were observed. First, for some categories, the larger the community the more adequate was the supply of the professionals. Here the proportions of respondents indicating no shortage increased with the increasing size of the community. The categories showing this pattern are recreation workers, agricultural equipment repairmen, accountants, lawyers, newspaper reporters and radio and television announcers. In the case of computer specialists the pattern was opposite.

A second type of pattern is shown by the perceived supply of pharmacists, embalmers, librarians and clergymen. The no shortage percentages seem to resemble a bell-shaped curve, indicating that medium sized communities were adequately served in comparison to small or large communities.

A third type pattern is exhibited by architects and draftsmen. In this pattern the curve is inverted. Here both the small and large communities seem to be a little better supplied than the medium sized communities.

The availability of surveyors and public relations workers exhibits a fourth pattern. In this case, the larger metropolitan communities with 50,000 or more inhabitants seemed to have a sufficiency of supply over all of the other community size categories. For the remaining eight professional categories, no systematic pattern of variation by community size is readily apparent.

Factor analysis of the data has yielded some very interesting sociological insights which have been discussed in the main body of the report.

In light of the above it seems clear that new and better means for attracting professional and semi-professional personnel to non-urban communities throughout North Carolina need to be found. These means need not be a unique set of characteristics applicable unilaterally throughout the state, but rather a multiple arrangement of features which more closely relate to the needs of the individual community and/or combination of community and surrounding region. One concept that comes to the fore is an exchange precedure wherein the community tallied its advantageous potentialities to match and trade against its professional needs. This procedure could be a relatively simple process articulated through a combination of private and public interests who are highly motivated and involved with the perservation of their community. Additional suggestions supported by empirical data will be presented in a subsequent report.

Footnotes

1. With the exception of 1932 and 1945, the recorded net annual balance has always favored migration from rural to urban areas. See, for example, Thomlinson, Ralph, Population Dynamics: Causes and Consequences of World Demographic Change, New York: Random House, 1965, pp. 217-18.

2. The movement of the Blacks from the South to the North had been occurring prior to 1915, but it took the outbreak of the war in Europe in 1916 to accelerate the flow ---- combined with the siege of economic opportunitie and intense racial discrimination in the South, which had remained basically unchanged since the Civil War, the immigration northward erupted between 1916 and 1918 when over half million Blacks left the South in what has come to be called the "Great Migration." The movement continued until 1970. Data reveal a dramatic upsurge in the volume of counter stream --- between 1970 and 1973, 247,000 Blacks moved to the South while only 156,000 moved from the South (selectively quoted from Campbell, Rex R., Daniel M. Johnson and Gary Strangler, "Return of Black People to the South," Rural Sociology, Vol. 39, No. 4 Winter 1974, pp. 514-528).

3. Petersen, William, "Internal Migration and Economic Development in Northern America," Annals of the American Academy of Political and Social Sciences, Vol. CCCXVI, March 1958, pp. 52-59.

4. U. S. Bureau of the Census, Statistical Abstract of the United States: 1975. (96th edition). Washington, D.C. 1975 p. 37.

5. The News and Observor, Raleigh, North Carolina, June 8, 1975, p. 1.

6. By rural we are referring to population aggregated in geographical locations where the size and density are relatively small. Definition by Sjoberg, Gideon, "The Rural-Urban Dimension in Pre-Industrial, Transitional, and Industrial Societies," pp. 127-159 in Robert E.L. Faris (ed.), Handbook of Modern Sociology. Chicago: Rand McNally, 1964.

7. See, for example, the U.S. Department of Agriculture, National Growth and its Distribution. Proceeding of Symposium on Communities of Tomorrow, December 11-12, 1967, Washington, D.C.

8. Robbins, Francis G., "Rural Development Bills Introduced in the 92nd Congress, 1st Session through September 17, 1971." HD2711 Congressional Research Service, Library of Congress, September 17, 1971.

9. For details and analysis see, United States Senate, Guide to the Rural Development Act of 1972. Subcommittee on Rural Development of the Committee on Agriculture and Forestry, December 10, 1973 (revised in 1975 as Revised Guide to the Rural Development Act of 1972); Noland, M.F. and W.D. Heffrnan, "The Rural Development Act of 1972: A Skeptical View," Rural Sociology, Vol. 39, No. 4, Winter 1974, pp. 536-545; and Stanfield, G.G., "A Recritique and Reanalysis of the Rural Development Act of 1972," Rural Sociology, Vol. 40, No. 1 Spring 1975, pp. 75-79.

10. Guide to the Rural Development Act of 1972, Subcommittee on Rural Development of the Committee on Agriculture and Forestry, United States Senate, 93rd. Congress, 1st Session, December 10, 1973, p. 11.

N.C. State University -- Department of Sociology & Anthropology

Name of your community_____ Population of your community_____

Your present occupation_____ Your age on last birthday_____

Your sex: ☐ M ☐ F

Are you presently holding an elected (local, state r federal) office? ☐ Yes ☐ No

Is your community ☐ Primarily rural, ☐ Partly rural, partly urban, ☐ Primarily urban

Do you consider yourself native of the part of N.C. you live in? ☐ Yes ☐ No

****

Please rate your community (named above) in terms of the supply of qualified people in the following professional and job categories. As you see it, would you say that in your community there is serious shortage, minor shortage, sufficient supply, or oversupply of people in the following categories to meet the needs of your community? Place a check mark (✓) at the point on each line which you think best describes the situation in your community.

	SERIOUS SHORTAGE many vacant positions, difficult to attract qualified persons	MINOR SHORTAGE	SUFFICIENT SUPPLY to meet the community needs	OVERSUPPLY	NOT APPLICABLE none needed none available
Plumbers					
Qualified people for law enforcement					
Accountants					
Agri equipment repairmen					
Architects					
Auto mechanics					
Computer specialists					
Engineers					
Foresters					
Home appliance repairmen					
Lawyers					
Librarians					
Physicians					
Dentists					
Optometrists					
Pharmacists					
Veterinarians					
Nurses					
Health technicians					
Clergymen					
Social workers					
Recreation workers					

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Questionnaire continued

	SERIOUS SHORTAGE many vacant positions, difficult to attract qualified persons	MINOR SHORTAGE	SUFFICIENT SUPPLY to meet the community needs	OVERSUPPLY	NOT APPLICABLE none needed none available
Qualified persons for:					
Adult education teachers					
Elementary school "					
Prekinder/kindergarten teachers					
Jr. & Sr. High teachers					
Draftsmen					
Surveyors					
Embalmers					
Vocational counselors					
Radio & TV announcers					
Newspaper reporters					
Public relations workers					

Please name 3 of the above categories in which you think your community has most serious shortage. Now indicate if, in your judgment, removing these shortages will require help and aid from state or federal governments.

	State Gov't. Help Necessary		Federal Gov't Help Necessary	
1.	☐ Yes	☐ No	☐ Yes	☐ No
2.	☐ Yes	☐ No	☐ Yes	☐ No
3.	☐ Yes	☐ No	☐ Yes	☐ No

APPENDIX B

North Carolina Communities, Their Population and Type

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Aberdeen	1,670	8	0.0	87.5	12.5	0.0	100.0
Ahoskie	5,130	6	66.7	16.7	16.7	0.0	100.0
Albermarle	11,070	14	0.0	57.1	35.7	7.1	99.9
Alexander Mills	1,025	1	100.0	0.0	0.0	0.0	100.0
Alliance	577	3	66.7	0.0	0.0	33.3	100.0
Andrews	1,420	7	57.1	28.6	14.3	0.0	100.0
Angier	1,480	7	28.6	71.4	0.0	0.0	100.0
Apex	2,470	9	33.3	55.6	11.1	0.0	100.0
Arapahoe	212	6	50.0	50.0	0.0	0.0	100.0
Archdale	5,220	4	0.0	50.0	50.0	0.0	100.0
Asheboro	13,980	15	0.0	26.7	66.7	6.7	100.0
Asheville	57,680	20	0.0	10.7	90.0	0.0	100.0
Askewville	280	6	100.0	0.0	0.0	0.0	100.0
Atkinson	330	5	60.0	40.0	0.0	0.0	100.0
Atlantic Beach	360	3	0.0	0.0	66.7	33.3	100.0
Aulander	980	6	66.7	0.0	33.3	0.0	100.0
Aurora	660	5	40.0	60.0	0.0	0.0	100.0
Autryville	230	4	50.0	25.0	25.0	0.0	100.0
Ayden	3,530	10	40.0	40.0	10.0	10.0	100.0
Bailey	730	5	80.0	20.0	0.0	0.0	100.0
Bakersville	410	2	100.0	0.0	0.0	0.0	100.0
Banner Elk	840	7	57.1	42.9	0.0	0.0	100.0
Bath	210	2	0.0	100.0	0.0	0.0	100.0
Battleboro	830	2	100.0	0.0	0.0	0.0	100.0
Bayboro	680	5	60.0	20.0	0.0	20.0	100.0
Bear Grass	100	-	-	-	-	-	-
Beaufort	3,480	11	9.1	81.8	0.0	9.1	100.0
Belhaven	2,230	2	0.0	50.0	50.0	0.0	100.0
Belmont	5,250	8	0.0	50.0	50.0	0.0	100.0
Benson	2,300	3	0.0	66.7	33.3	0.0	100.0
Bessemer City	5,150	4	0.0	100.0	0.0	0.0	100.0
Bethel	1,510	9	11.1	88.9	0.0	0.0	100.0
Beulaville	1,200	10	70.0	20.0	10.0	0.0	100.0
Biltmore Forest	1,350	2	0.0	0.0	50.0	50.0	100.0
Biscoe	1,280	6	33.3	66.7	0.0	0.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Black Creek	470	5	40.0	60.0	0.0	0.0	100.0
Black Mountain	3,500	7	0.0	85.7	14.3	0.0	100.0
Bladenboro	1,950	6	66.7	33.3	0.0	0.0	100.0
Blowing Rock	810	4	50.0	50.0	0.0	0.0	100.0
Boiling Sprg. Lakes	550	6	66.7	33.3	0.0	0.0	100.0
Boiling Springs	2,620	5	0.0	100.0	0.0	0.0	100.0
Bolton	540	3	33.3	33.3	33.3	0.0	100.0
Boone	10,250	1	0.0	0.0	100.0	0.0	100.0
Boonville	710	3	33.3	66.7	0.0	0.0	100.0
Bostic	300	5	60.0	40.0	0.0	0.0	100.0
Brevard	5,190	9	33.3	44.4	22.2	0.0	100.0
Bridgeton	510	2	50.0	0.0	0.0	50.0	100.0
Broadway	770	7	14.3	71.4	14.3	0.0	100.0
Brookford	590	-	-	-	-	-	-
Brunswick	220	4	50.0	50.0	0.0	0.0	100.0
Bryson City	1,390	3	33.3	33.3	33.3	0.0	100.0
Bunn	290	2	100.0	0.0	0.0	0.0	100.0
Burgaw	1,740	4	50.0	50.0	0.0	0.0	100.0
Burlington	38,470	15	0.0	13.3	86.7	0.0	100.0
Burnsville	1,430	5	20.0	80.0	0.0	0.0	100.0
Butner	3,538	2	0.0	50.0	50.0	0.0	100.0
Calabash	500	-	-	-	-	-	-
Calypso	450	1	100.0	0.0	0.0	0.0	100.0
Candor	550	7	85.7	14.3	0.0	0.0	100.0
Canton	5,270	9	0.0	55.6	22.2	22.2	100.0
Cape Carteret	740	3	0.0	66.7	0.0	33.3	100.0
Carolina Beach	1,830	6	0.0	16.7	50.0	33.3	100.0
Carrboro	6,400	3	0.0	33.3	66.7	0.0	100.0
Carthage	1,050	6	83.3	16.7	0.0	0.0	100.0
Cary	8,860	10	0.0	20.0	80.0	0.0	100.0
Casar	410	1	100.0	0.0	0.0	0.0	100.0
Castalia	270	3	66.7	33.3	0.0	0.0	100.0
Catawba	570	5	0.0	60.0	40.0	0.0	100.0
Centerville	123	2	100.0	0.0	0.0	0.0	100.0
Cerro Gordo	190	7	85.7	14.3	0.0	0.0	100.0
Chadbourn	2,270	11	72.7	27.3	0.0	0.0	100.0
Chapel Hill	30,310	13	0.0	30.8	69.2	0.0	100.0
Charlotte	242,950	22	4.5	0.0	95.5	0.0	100.0
Cherryville	5,620	3	0.0	66.7	33.3	0.0	100.0
China Grove	1,830	7	14.3	57.1	28.6	0.0	100.0
Chocowinity	560	3	66.7	33.3	0.0	0.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Claremont	800	7	14.3	71.4	14.3	0.0	100.0
Clarkton	680	4	25.0	75.0	0.0	0.0	100.0
Clayton	3,240	7	14.3	57.1	14.3	14.3	100.0
Cleveland	620	3	33.3	66.7	0.0	0.0	100.0
Clinton	7,530	9	11.1	44.4	44.4	0.0	100.0
Cofield	320	1	100.0	0.0	0.0	0.0	100.0
Clyde	980	5	20.0	80.0	0.0	0.0	100.0
Coats	1,080	10	50.0	50.0	0.0	0.0	100.0
Colerain	410	4	75.0	25.0	0.0	0.0	100.0
Columbia	910	3	66.7	33.3	0.0	0.0	100.0
Columbus	750	3	33.3	66.7	0.0	0.0	100.0
Como	211	6	100.0	0.0	0.0	0.0	100.0
Concord	18,750	14	0.0	35.7	57.1	0.0	100.0
Conetoe	160	2	0.0	100.0	0.0	0.0	100.0
Conover	3,610	1	0.0	0.0	100.0	0.0	100.0
Conway	700	8	62.5	37.5	0.0	0.0	100.0
Cornelius	1,280	5	20.0	60.0	20.0	0.0	100.0
Cove City	480	3	66.7	33.3	0.0	0.0	100.0
Cramerton	2,900	7	28.6	14.3	52.1	0.0	100.0
Creedmoor	1,600	8	25.00	62.5	12.5	0.0	100.0
Creswell	680	1	0.0	100.0	0.0	0.0	100.0
Crossnore	280	7	42.9	42.9	14.3	0.0	100.0
Dallas	4,180	6	0.0	66.7	33.3	0.0	100.0
Danbury	160	4	75.0	25.0	0.0	0.0	100.0
Davidson	2,930	4	25.0	50.0	25.0	0.0	100.0
Denton	1,040	4	100.0	0.0	0.0	0.0	100.0
Dillsboro	230	-	-	-	-	-	-
Dobson	1,020	6	33.3	66.7	0.0	0.0	100.0
Dover	590	-	-	-	-	-	-
Drexel	1,500	1	0.0	100.0	0.0	0.0	100.0
Dublin	280	2	0.0	50.0	0.0	50.0	100.0
Dunn	8,950	12	25.0	75.0	0.0	0.0	100.0
Durham	97,740	25	0.0	16.0	84.0	0.0	100.0
Earl	260	3	66.7	33.3	0.0	0.0	100.0
East Bend	500	1	0.0	0.0	0.0	100.0	100.0
East Laurinburg	470	1	0.0	100.0	0.0	0.0	100.0
East Spencer	2,220	3	0.0	66.7	33.3	0.0	100.0
Eden	16,220	6	0.0	0.0	83.3	16.7	100.0
Edenton	4,990	8	37.5	37.5	25.0	0.0	100.0
Elizabeth City	14,410	14	14.3	71.4	14.3	0.0	100.0

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Elizabethtown	1,420	8	62.5	25.0	12.5	0.0	100.0
Elkin	2,970	11	27.3	54.5	9.1	9.1	100.0
Elk Park	540	3	66.7	33.3	0.0	0.0	100.0
Ellerbe	940	8	50.0	25.0	25.0	0.0	100.0
Elm City	1,310	4	0.0	100.0	0.0	0.0	100.0
Elon College	2,450	5	20.0	20.0	60.0	0.0	100.0
Emerald Isle	150	2	50.0	50.0	0.0	0.0	100.0
Enfield	3,340	5	100.0	0.0	0.0	0.0	100.0
Erwin	2,890	7	14.3	42.9	28.6	14.3	100.0
Eureka	270	-	-	-	-	-	-
Everetts	200	1	0.0	100.0	0.0	0.0	100.0
Fair Bluff	1,080	4	75.0	0.0	0.0	25.0	100.0
Fairmont	3,070	6	0.0	83.3	16.7	0.0	100.0
Faison	590	4	25.0	25.0	50.0	0.0	100.0
Faith	510	5	20.0	60.0	0.0	20.0	100.0
Falcon	380	3	66.7	0.0	33.3	0.0	100.0
Falkland	130	4	100.0	0.0	0.0	0.0	100.0
Fallston	390	5	80.0	20.0	0.0	0.0	100.0
Farmville	4,530	13	38.5	61.5	0.0	0.0	100.0
Fayetteville	54,500	22	0.0	9.1	90.9	0.0	100.0
Forest City	7,410	11	9.1	45.5	45.5	0.0	100.0
Fountain	430	3	66.7	33.3	0.0	0.0	100.0
Four Oaks	1,090	5	40.0	60.0	0.0	0.0	100.0
Franklin	2,410	7	57.1	28.6	14.3	0.0	100.0
Franklinton	1,480	4	25.0	75.0	0.0	0.0	100.0
Franklinville	810	-	-	-	-	-	-
Fremont	1,630	4	50.0	25.0	0.0	25.0	100.0
Fuquay-Varina	3,600	10	10.0	90.0	0.0	0.0	100.0
Garland	700	4	100.0	0.0	0.0	0.0	100.0
Garner	5,250	6	0.0	50.0	50.0	0.0	100.0
Garysburg	231	3	66.7	33.3	0.0	0.0	100.0
Gaston	1,080	6	33.3	50.0	16.7	0.0	100.0
Gastonia	49,350	19	0.0	15.8	84.2	0.0	100.0
Gatesville	330	4	50.0	50.0	0.0	0.0	100.0
Gibson	510	4	50.0	50.0	0.0	0.0	100.0
Gibsonville	2,090	8	0.0	50.0	25.0	25.0	100.0
Glen Alpine	810	4	25.0	75.0	0.0	0.0	100.0
Godwin	120	2	100.0	0.0	0.0	0.0	100.0
Goldsboro	27,090	15	6.7	66.7	26.7	0.0	100.0
Goldston	360	4	100.0	0.0	0.0	0.0	100.0

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Graham	8,360	7	0.0	14.3	85.7	0.0	100.0
Granite Falls	2,360	7	14.3	57.1	14.3	14.3	100.0
Granite Quarry	1,390	12	8.3	41.7	50.0	0.0	100.0
Greenevers	410	2	100.0	0.0	0.0	0.0	100.0
Greensboro	149,790	27	0.0	7.4	92.6	0.0	100.0
Greenville	30,660	16	6.3	50.0	43.8	0.0	100.0
Grifton	1,880	3	66.7	33.3	0.0	0.0	100.0
Grimesland	400	1	0.0	0.0	100.0	0.0	100.0
Grover	570	3	33.3	66.7	0.0	0.0	100.0
Halifax	330	2	100.0	0.0	0.0	0.0	100.0
Hamilton	580	5	80.0	20.0	0.0	0.0	100.0
Hamlet	4,730	7	14.3	71.4	14.3	0.0	100.0
Harrells	249	7	85.7	14.3	0.0	0.0	100.0
Harrellsville	160	2	100.0	0.0	0.0	0.0	100.0
Harrisburg	1,240	3	0.0	100.0	0.0	0.0	100.0
Havelock	6,550	7	0.0	71.4	28.6	0.0	100.0
Haw River	1,650	-	-	-	-	-	-
Hayesville	440	2	100.0	0.0	0.0	0.0	100.0
Hazelwood	2,120	5	0.0	20.0	40.0	40.0	100.0
Henderson	13,850	8	0.0	62.5	37.5	0.0	100.0
Hendersonville	6,520	5	20.0	40.0	40.0	0.0	100.0
Hertford	2,090	6	66.7	33.3	0.0	0.0	100.0
Hickory	21,260	15	0.0	13.3	80.0	6.7	100.0
Highlands	590	5	80.0	20.0	0.0	0.0	100.0
High Point	63,580	28	0.0	7.1	89.3	3.6	100.0
High Shoals	1,200	2	0.0	100.0	0.0	0.0	100.0
Hildebran	481	2	0.0	100.0	0.0	0.0	100.0
Hillsborough	1,490	5	0.0	100.0	0.0	0.0	100.0
Hobgood	520	3	66.7	33.3	0.0	0.0	100.0
Hoffman	460	3	66.7	33.3	0.0	0.0	100.0
Holden Beach	140	2	50.0	0.0	50.0	0.0	100.0
Holly Ridge	380	2	50.0	0.0	0.0	50.0	100.0
Holly Springs	710	1	100.0	0.0	0.0	0.0	100.0
Hookerton	460	1	100.0	0.0	0.0	0.0	100.0
Hope Mills	2,360	6	0.0	33.3	50.0	16.7	100.0
Hot Springs	650	4	0.0	0.0	100.0	0.0	100.0
Husdon	3,060	6	16.7	50.0	33.3	0.0	100.0
Huntersville	1,600	1	0.0	100.0	0.0	0.0	100.0
Indian Beach	50	2	0.0	100.0	0.0	0.0	100.0
Indian Trail	420	-	-	-	-	-	-

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Jackson	760	2	50.0	0.0	50.0	0.0	100.0
Jacksonville	16,300	8	0.0	25.0	50.0	25.0	100.0
Jamestown	1,310	4	0.0	25.0	75.0	0.0	100.0
Jamesville	540	3	66.7	33.3	0.0	0.0	100.0
Jefferson	970	-	-	-	-	-	-
Jonesville	1,660	2	50.0	50.0	0.0	0.0	100.0
Kelford	300	2	100.0	0.0	0.0	0.0	100.0
Kenansville	780	5	80.0	0.0	20.0	0.0	100.0
Kenly	1,460	3	100.0	0.0	0.0	0.0	100.0
Kernersville	5,210	8	12.5	37.5	37.5	12.5	100.0
Kill Devil Hills	390	1	100.0	0.0	0.0	0.0	100.0
Kings Mountain	8,590	8	0.0	50.0	50.0	0.0	100.0
Kinston	23,020	6	33.3	66.7	0.0	0.0	100.0
Kittrell	460	1	100.0	0.0	0.0	0.0	100.0
Knightdale	870	3	33.3	33.3	33.3	0.0	100.0
Kure Beach	430	2	0.0	0.0	100.0	0.0	100.0
LaGrange	2,740	-	-	-	-	-	-
Lake Lure	490	1	0.0	100.0	0.0	0.0	100.0
Lake Waccamaw	1,000	5	20.0	80.0	0.0	0.0	100.0
Landis	2,400	6	33.3	0.0	66.7	0.0	100.0
Lansing	280	6	33.3	33.3	16.7	16.7	100.0
Lattimore	260	1	0.0	100.0	0.0	0.0	100.0
Laurel Park	620	-	-	-	-	-	-
Laurinburg	9,150	7	0.0	71.4	28.6	0.0	100.0
Lawndale	520	2	0.0	50.0	50.0	0.0	100.0
Leggett	170	2	50.0	50.0	0.0	0.0	100.0
Lenoir	15,520	10	10.0	40.0	50.0	0.0	100.0
Lewiston	340	5	80.0	20.0	0.0	0.0	100.0
Lexington	17,390	5	0.0	60.0	40.0	0.0	100.0
Liberty	2,310	12	8.3	58.3	33.3	0.0	100.0
Lilesville	650	4	75.0	25.0	0.0	0.0	100.0
Lillington	1,170	7	42.9	42.9	0.0	14.3	100.0
Lincolnton	5,400	8	12.5	50.0	25.0	12.5	100.0
Littleton	940	6	66.7	33.3	0.0	0.0	100.0
Locust	1,450	5	20.0	40.0	20.0	20.0	100.0
Long Beach	540	8	25.0	62.5	12.5	0.0	100.0
Long View	3,370	3	0.0	33.3	33.3	33.3	100.0
Louisburg	3,100	7	57.1	28.6	14.3	0.0	100.0
Love Valley	50	3	100.0	0.0	0.0	0.0	100.0
Lowell	3,390	4	0.0	25.0	50.0	25.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Lucama	630	4	75.0	25.0	0.0	0.0	100.0
Lumberton	17,980	18	5.6	50.0	44.4	0.0	100.0
Macclesfield	560	3	33.3	33.3	33.3	0.0	100.0
Macon	200	1	100.0	0.0	0.0	0.0	100.0
Madison	2,090	12	16.7	83.3	0.0	0.0	100.0
Magnolia	620	4	75.0	25.0	0.0	0.0	100.0
Maiden	2,490	5	20.0	80.0	0.0	0.0	100.0
Manteo	570	3	100.0	0.0	0.0	0.0	100.0
Marion	3,330	7	0.0	100.0	0.0	0.0	100.0
Marshall	1,000	4	25.0	75.0	0.0	0.0	100.0
Mars Hill	1,650	1	0.0	100.0	0.0	0.0	100.0
Marshville	1,440	4	50.0	25.0	25.0	0.0	100.0
Matthews	800	2	0.0	100.0	0.0	0.0	100.0
Maxton	1,980	8	62.5	37.5	0.0	0.0	100.0
Mayodan	3,010	2	0.0	100.0	0.0	0.0	100.0
Maysville	920	4	75.0	25.0	0.0	0.0	100.0
McAdenville	990	4	0.0	50.0	50.0	0.0	100.0
McDonald	80	2	100.0	0.0	0.0	0.0	100.0
Mebane	2,810	8	0.0	100.0	0.0	0.0	100.0
Mesic	440	6	83.3	0.0	0.0	16.7	100.0
Middlesex	790	4	75.0	25.0	0.0	0.0	100.0
Milton	240	2	100.0	0.0	0.0	0.0	100.0
Minnesott Beach	90	3	66.7	33.3	0.0	0.0	100.0
Mint Hill	2,260	3	100.0	0.0	0.0	0.0	100.0
Mocksville	2,560	7	28.6	57.1	14.3	0.0	100.0
Monroe	11,470	7	0.0	71.4	28.6	0.0	100.0
Mooresville	9,400	8	0.0	50.0	12.5	37.5	100.0
Montreat	580	3	33.3	33.3	33.3	0.0	100.0
Morehead City	5,200	8	0.0	25.0	62.5	12.5	100.0
Morganton	15,550	8	0.0	50.0	37.5	12.5	100.0
Morrisville	210	1	100.0	0.0	0.0	0.0	100.0
Morven	580	3	33.3	66.7	0.0	0.0	100.0
Mount Airy	7,540	10	0.0	30.0	60.0	10.0	100.0
Mount Gilead	1,290	4	50.0	50.0	0.0	0.0	100.0
Mount Holly	5,290	5	0.0	40.0	60.0	0.0	100.0
Mount Olive	5,070	9	33.3	22.2	33.3	11.1	100.0
Mount Pleasant	1,210	8	12.5	62.5	12.5	12.5	100.0
Murfreesboro	3,670	7	42.9	57.1	0.0	0.0	100.0
Murphy	2,110	12	25.0	50.0	8.3	16.7	100.0
Nags Head	440	8	25.0	50.0	25.0	0.0	100.0

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Nashville	1,780	9	33.3	66.7	0.0	0.0	100.0
New Bern	14,690	9	0.0	44.4	44.4	11.1	100.0
Newland	540	4	100.0	0.0	0.0	0.0	100.0
New London	310	4	25.0	50.0	25.0	0.0	100.0
Newport	1,980	7	57.1	42.9	0.0	0.0	100.0
Newton	8,080	12	0.0	33.3	66.7	0.0	100.0
Newton Grove	600	3	33.3	66.7	0.0	0.0	100.0
Norlina	1,100	6	66.7	33.3	0.0	0.0	100.0
North Wilkesboro	3.330	12	0.0	41.7	50.0	8.3	100.0
Norwood	1,930	9	44.4	55.6	0.0	0.0	100.0
Oakboro	580	4	25.0	75.0	0.0	0.0	100.0
Oak City	560	1	100.0	0.0	0.0	0.0	100.0
Ocean Isle Beach	110	1	100.0	0.0	0.0	0.0	100.0
Old Fort	650	6	0.0	83.3	16.7	0.0	100.0
Oriental	440	5	60.0	40.0	0.0	0.0	100.0
Oxford	7,260	13	15.4	76.9	7.7	0.0	100.0
Pantego	210	4	75.0	25.0	0.0	0.0	100.0
Parkton	530	7	85.7	14.3	0.0	0.0	100.0
Parmele	380	1	0.0	0.0	0.0	100.0	100.0
Patterson Springs	640	-	-	-	-	-	-
Peachland	560	5	60.0	40.0	0.0	0.0	100.0
Pembroke	2,250	9	77.8	22.2	0.0	0.0	100.0
Pikeville	610	4	50.0	50.0	0.0	0.0	100.0
Pilot Mountain	1,340	7	42.9	57.1	0.0	0.0	100.0
Pine Knoll Shores	350	3	0.0	33.3	66.7	0.0	100.0
Pine Bluff	610	5	0.0	80.0	20.0	0.0	100.0
Pinehurst	1,080	9	22.2	22.2	44.4	11.1	100.0
Pine Level	1,020	2	50.0	50.0	0.0	0.0	100.0
Pinetops	1,410	5	20.0	40.0	40.0	0.0	100.0
Pineville	1,980	6	16.7	66.7	16.7	0.0	100.0
Pink Hill	550	6	83.3	16.7	0.0	0.0	100.0
Pittsboro	1,480	7	57.1	42.9	0.0	0.0	100.0
Plymouth	4,870	10	30.0	60.0	10.0	0.0	100.0
Polkton	970	2	0.0	0.0	100.0	0.0	100.0
Polkville	510	5	60.0	40.0	0.0	0.0	100.0
Pollocksville	460	5	20.0	60.0	20.0	0.0	100.0
Powellsville	260	3	66.7	33.3	0.0	0.0	100.0
Princeton	1,070	2	50.0	50.0	0.0	0.0	100.0
Princeville	640	-	-	-	-	-	-
Proctorville	160	3	33.3	0.0	66.7	0.0	100.0

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Raeford	3,330	12	25.0	33.3	41.7	0.0	100.0
Raleigh	132,250	20	0.0	0.0	95.0	5.0	100.0
Ramseur	1,330	1	0.0	100.0	0.0	0.0	100.0
Randleman	2,310	3	0.0	100.0	0.0	0.0	100.0
Ranlo	2,130	3	0.0	0.0	100.0	0.0	100.0
Red Oak	359	2	50.0	50.0	0.0	0.0	100.0
Red Springs	3,670	8	25.0	62.5	12.5	0.0	100.0
Reidsville	13,680	9	0.0	66.7	33.3	0.0	100.0
Rhodhiss	780	4	25.0	50.0	0.0	25.0	100.0
Richfield	310	2	100.0	0.0	0.0	0.0	100.0
Richlands	890	4	50.0	50.0	0.0	0.0	100.0
Rich Square	1,280	5	80.0	20.0	0.0	0.0	100.0
Roanoke Rapids	13,680	11	0.0	27.3	63.6	9.1	100.0
Robbins	1,060	7	42.9	42.9	0.0	14.3	100.0
Robbinsville	780	1	0.0	100.0	0.0	0.0	100.0
Robersonville	1,970	8	62.5	37.5	0.0	0.0	100.0
Rockingham	6,010	8	12.5	62.5	25.0	0.0	100.0
Rockwell	1,000	7	42.9	42.9	0.0	14.3	100.0
Rocky Mount	35,710	14	0.0	28.6	71.4	0.0	100.0
Rolesville	570	5	60.0	20.0	0.0	20.0	100.0
Ronda	470	7	28.6	71.4	0.0	0.0	100.0
Roper	670	2	50.0	50.0	0.0	0.0	100.0
Roseboro	1,290	8	50.0	50.0	0.0	0.0	100.0
Hose Hill	1,510	4	50.0	50.0	0.0	0.0	100.0
Rosman	400	2	100.0	0.0	0.0	0.0	100.0
Rowland	1,400	8	37.5	50.0	0.0	12.5	100.0
Roxboro	5,510	9	11.1	55.6	22.2	11.1	100.0
Roxobel	350	5	100.0	0.0	0.0	0.0	100.0
Ruth	350	3	33.3	66.7	0.0	0.0	100.0
Rutherfordton	3,260	3	0.0	33.3	66.7	0.0	100.0
St. Paul	2,040	4	50.0	25.0	25.0	0.0	100.0
Salemburg	740	3	0.0	100.0	0.0	0.0	100.0
Salisbury	22,520	17	5.9	35.3	47.1	11.8	100.0
Saluda	550	3	33.3	66.7	0.0	0.0	100.0
Sanford	11,820	14	0.0	71.4	28.6	0.0	100.0
Saratoga	390	2	100.0	0.0	0.0	0.0	100.0
Scotland Neck	2,890	5	20.0	60.0	20.0	0.0	100.0
Seaboard	610	-	-	-	-	-	-
Seagrove	350	5	100.0	0.0	0.0	0.0	100.0
Selma	4,530	10	20.0	70.0	10.0	0.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Seven Springs	190	1	100.0	0.0	0.0	0.0	100.0
Severn	360	7	85.7	0.0	0.0	14.3	100.0
Shallotte	680	3	100.0	0.0	0.0	0.0	100.0
Sharpsburg	890	2	0.0	100.0	0.0	0.0	100.0
Shelby	16,200	12	0.0	41.7	58.3	0.0	100.0
Siler City	4,700	5	0.0	60.0	20.0	20.0	100.0
Sims	210	1	100.0	0.0	0.0	0.0	100.0
Smithfield	6,920	9	11.1	77.8	11.1	0.0	100.0
Snow Hill	1,410	5	100.0	0.0	0.0	0.0	100.0
Southern Pines	6,320	4	0.0	100.0	0.0	0.0	100.0
Southport	2,480	7	28.6	42.9	28.6	0.0	100.0
Sparta	1,400	4	100.0	0.0	0.0	0.0	100.0
Speed	140	-	-	-	-	-	-
Spencer	3,080	5	20.0	20.0	60.0	0.0	100.0
Spencer Mountain	300	-	-	-	-	-	-
Spindale	3,890	10	10.0	60.0	10.0	20.0	100.0
Spring Hope	1,380	5	100.0	0.0	0.0	0.0	100.0
Spring Lake	3,750	4	0.0	50.0	25.0	25.0	100.0
Spruce Pine	2,330	6	16.7	83.3	0.0	0.0	100.0
Staley	230	2	100.0	0.0	0.0	0.0	100.0
Stanfield	460	3	33.3	66.7	0.0	0.0	100.0
Stanley	2,380	2	0.0	50.0	0.0	50.0	100.0
Stantonsburg	870	4	50.0	50.0	0.0	0.0	100.0
Star	920	5	40.0	60.0	0.0	0.0	100.0
Statesville	20,380	17	5.9	47.1	47.0	0.0	100.0
Stedman	500	3	33.3	33.3	0.0	33.3	100.0
Stoneville	1,060	6	33.3	66.7	0.0	0.0	100.0
Stonewall	335	4	100.0	0.0	0.0	0.0	100.0
Stovall	380	7	85.7	0.0	0.0	14.3	100.0
Sunset Beach	120	5	60.0	20.0	20.0	0.0	100.0
Surf City	170	2	50.0	50.0	0.0	0.0	100.0
Swansboro	1,200	4	25.0	50.0	0.0	25.0	100.0
Sylva	1,560	5	60.0	20.0	0.0	20.0	100.0
Tabor City	2,500	5	20.0	60.0	20.0	0.0	100.0
Tarboro	9,870	13	0.0	46.2	53.8	0.0	100.0
Tar Heel	90	1	100.0	0.0	0.0	0.0	100.0
Taylorsville	1,210	1	0.0	0.0	0.0	100.0	100.0
Teachey	230	1	100.0	0.0	0.0	0.0	100.0
Thomasville	15,250	14	0.0	28.6	71.4	0.0	100.0
Topsail Beach	110	5	20.0	40.0	20.0	20.0	100.0

Community	Population	No. of Leaders	Community Type				
			Rural	Rural-Urban	Urban	No Response	Total
Trenton	580	3	100.0	0.0	0.0	0.0	100.0
Trent Woods	752	-	-	-	-	-	-
Troutman	840	3	100.0	0.0	0.0	0.0	100.0
Troy	2,430	4	0.0	50.0	25.0	25.0	100.0
Tryon	1,940	3	0.0	100.0	0.0	0.0	100.0
Turkey	400	4	25.0	75.0	0.0	0.0	100.0
Valdese	3,240	11	27.3	54.5	18.2	0.0	100.0
Vanceboro	760	4	75.0	25.0	0.0	0.0	100.0
Vandemere	370	1	100.0	0.0	0.0	0.0	100.0
Vass	950	1	100.0	0.0	0.0	0.0	100.0
Waco	250	4	50.0	50.0	0.0	0.0	100.0
Wade	330	3	33.3	66.7	0.0	0.0	100.0
Wadesboro	4,100	6	0.0	66.7	33.3	0.0	100.0
Wagram	740	3	33.3	33.3	0.0	33.3	100.0
Wake Forest	3,220	5	60.0	40.0	0.0	0.0	100.0
Wallace	3,120	9	44.4	44.4	11.1	0.0	100.0
Walnut Cove	1,250	4	75.0	25.0	0.0	0.0	100.0
Walstonburg	180	5	60.0	40.0	0.0	0.0	100.0
Warrenton	1,140	6	50.0	33.3	16.7	0.0	100.0
Warsaw	2,770	5	40.0	20.0	20.0	20.0	100.0
Washington	8,770	12	25.0	58.3	16.7	0.0	100.0
Washington Park	570	2	0.0	50.0	50.0	0.0	100.0
Waxhaw	1,310	5	0.0	0.0	100.0	0.0	100.0
Waynesville	6,680	2	100.0	0.0	0.0	0.0	100.0
Weaverville	1,320	3	0.0	33.3	66.7	0.0	100.0
Webster	181	2	100.0	0.0	0.0	0.0	100.0
Weldon	2,370	8	0.0	87.5	0.0	12.5	100.0
Wendell	1,980	4	75.0	25.0	0.0	0.0	100.0
West Jefferson	870	2	100.0	0.0	0.0	0.0	100.0
Wispering Pines	380	2	50.0	0.0	50.0	0.0	100.0
Whitakers	940	2	0.0	100.0	0.0	0.0	100.0
White Lake	280	2	50.0	50.0	0.0	0.0	100.0
Whiteville	5,350	9	11.1	77.8	11.1	0.0	100.0
Wilkesboro	2,130	6	0.0	16.7	83.3	0.0	100.0
Williamston	6,550	10	30.0	60.0	0.0	0.0	100.0
Wilmington	48,1500	15	0.0	6.7	93.3	0.0	100.0
Wilson	29,550	13	0.0	84.6	15.4	0.0	100.0
Windsor	2,450	8	37.5	62.5	0.0	0.0	100.0
Winfall	750	1	0.0	100.0	0.0	0.0	100.0
Wingate	2,850	4	50.0	0.0	0.0	50.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Winston-Salem	138,230	32	0.0	6.3	90.6	3.1	100.0
Winterville	1,440	3	100.0	0.0	0.0	0.0	100.0
Winton	920	4	75.0	0.0	25.0	0.0	100.0
Woodfin	3,800	4	0.0	100.0	0.0	0.0	100.0
Woodland	770	3	33.3	66.7	0.0	0.0	100.0
Wrightsville Beach	1,790	7	0.0	0.0	100.0	0.0	100.0
Yadkinville	2,370	8	37.5	62.5	0.0	0.0	100.0
Yaupon Beach	370	4	0.0	25.0	75.0	0.0	100.0
Youngsville	560	5	60.0	40.0	0.0	0.0	100.0
Zebulon	1,890	8	12.5	75.0	12.5	0.0	100.0
Unincorporated							
Linville	-	1	100.0	0.0	0.0	0.0	100.0
Julian	-	1	100.0	0.0	0.0	0.0	100.0
Rowan Mill	-	1	0.0	0.0	100.0	0.0	100.0
Core Creek	-	1	100.0	0.0	0.0	0.0	100.0
Union Ridge	-	1	100.0	0.0	0.0	0.0	100.0
Kannapolis	-	1	0.0	100.0	0.0	0.0	100.0
Chapel Grove	-	1	100.0	0.0	0.0	0.0	100.0
Level Cross	-	1	100.0	0.0	0.0	0.0	100.0
Charity X Roads	-	2	100.0	0.0	0.0	0.0	100.0
Riverside	-	1	100.0	0.0	0.0	0.0	100.0
Marks Creek	-	1	0.0	100.0	0.0	0.0	100.0
Saddle Tree	-	1	100.0	0.0	0.0	0.0	100.0
Hyatt Creek	-	1	100.0	0.0	0.0	0.0	100.0
Swannanoa Valley	-	2	50.0	50.0	0.0	0.0	100.0
Vance Township	-	1	0.0	100.0	0.0	0.0	100.0
Harper's Road	-	1	100.0	0.0	0.0	0.0	100.0
Bunner Town	-	1	0.0	0.0	100.0	0.0	100.0
Goose Nest	-	1	100.0	0.0	0.0	0.0	100.0
Sampson	-	1	100.0	0.0	0.0	0.0	100.0
Government Township	-	2	50.0	50.0	0.0	0.0	100.0
County Designated							
Gaston County	-	5	0.0	100.0	0.0	0.0	100.0
Haywood County	-	2	0.0	100.0	0.0	0.0	100.0
Lenoir County	-	1	0.0	100.0	0.0	0.0	100.0
Polk County	-	1	0.0	100.0	0.0	0.0	100.0
Mechlenberg County	-	6	0.0	0.0	100.0	0.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Rutherford County	-	1	100.0	0.0	0.0	0.0	100.0
Cumberland County	-	3	0.0	66.7	33.3	0.0	100.0
Richmond County	-	5	20.0	80.0	0.0	0.0	100.0
Macon County	-	2	100.0	0.0	0.0	0.0	100.0
Buncombe County	-	3	0.0	66.7	0.0	33.3	100.0
Rowan County	-	3	0.0	100.0	0.0	0.0	100.0
Burke County	-	2	0.0	100.0	0.0	0.0	100.0
Orange County	-	2	0.0	100.0	0.0	0.0	100.0
Bladen County	-	2	50.0	50.0	0.0	0.0	100.0
Montgomery	-	1	100.0	0.0	0.0	0.0	100.0
Caldwell County	-	3	33.3	66.7	0.0	0.0	100.0
Tyrrell County	-	1	100.0	0.0	0.0	0.0	100.0
Surry County	-	1	0.0	100.0	0.0	0.0	100.0
Transylvania County	-	4	0.0	100.0	0.0	0.0	100.0
Pamlico County	-	1	100.0	0.0	0.0	0.0	100.0
Martin County	-	2	0.0	100.0	0.0	0.0	100.0
Catawba County	-	1	0.0	0.0	100.0	0.0	100.0
Washington County	-	2	100.0	0.0	0.0	0.0	100.0
Gates County	-	1	100.0	0.0	0.0	0.0	100.0
Craven County	-	3	33.3	66.7	0.0	0.0	100.0
Johnston County	-	2	0.0	100.0	0.0	0.0	100.0
Forsyth County	-	3	0.0	66.7	33.3	0.0	100.0
Dare County	-	1	100.0	0.0	0.0	0.0	100.0
Clay County	-	1	100.0	0.0	0.0	0.0	100.0
Pitt County	-	3	0.0	100.0	0.0	0.0	100.0
Brunswick County	-	2	50.0	50.0	0.0	0.0	100.0
Henderson County	-	4	0.0	100.0	0.0	0.0	100.0
Guilford County	-	1	0.0	100.0	0.0	0.0	100.0
Wayne County	-	2	50.0	50.0	0.0	0.0	100.0
North Hampton County	-	1	100.0	0.0	0.0	0.0	100.0
Vance County	-	1	0.0	100.0	0.0	0.0	100.0
Union County	-	2	50.0	50.0	0.0	0.0	100.0
Scotland County	-	2	0.0	100.0	0.0	0.0	100.0
Lincoln County	-	2	0.0	100.0	0.0	0.0	100.0
Jones County	-	2	100.0	0.0	0.0	0.0	100.0
Avery County	-	1	0.0	100.0	0.0	0.0	100.0
Granville County	-	1	0.0	100.0	0.0	0.0	100.0
Stanly County	-	1	0.0	100.0	0.0	0.0	100.0
Person County	-	2	0.0	100.0	0.0	0.0	100.0
Moore County	-	2	0.0	100.0	0.0	0.0	100.0

Community	Population	No. of Leaders	Community Type: Rural	Rural-Urban	Urban	No Response	Total
Alexander County	-	2	100.0	0.0	0.0	0.0	100.0
Anson County	-	2	50.0	0.0	0.0	50.0	100.0
Cleveland County	-	1	0.0	100.0	0.0	0.0	100.0
Chowan County	-	2	0.0	100.0	0.0	0.0	100.0
Madison County	-	2	0.0	100.0	0.0	0.0	100.0
Total: 516	-	*2581					

* The difference between leaders contacted and the number of respondents is attributed to the fact that 9 respondents failed to clearly identify their community of residence and 9 other values were lost as coding errors. Therefore, the total number of respondents remains consistent at 2599.